FREIGHT TRAFFIC ISSUE

Big Rail Supplier Turns To TOFC

November 28, 1960

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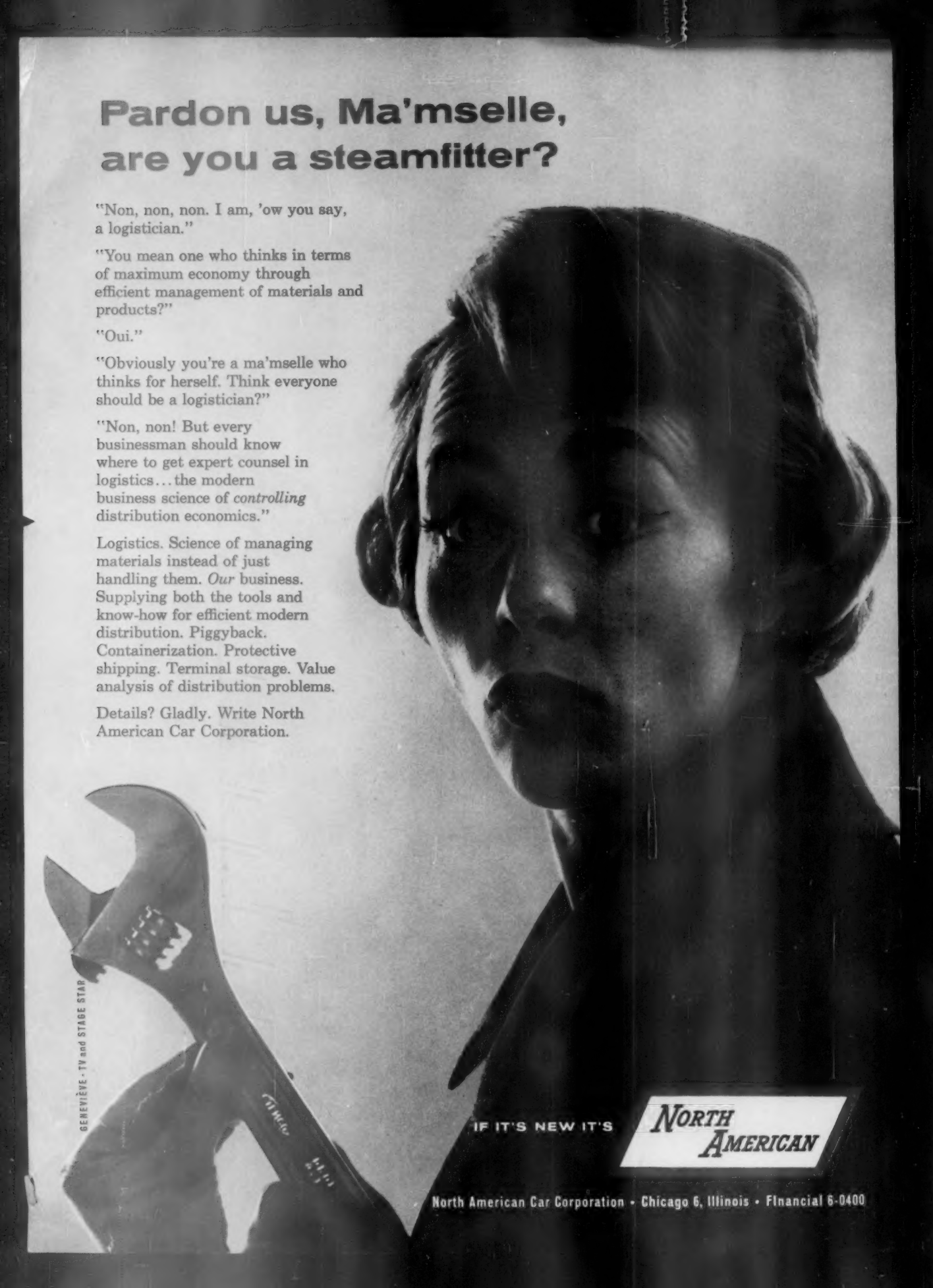


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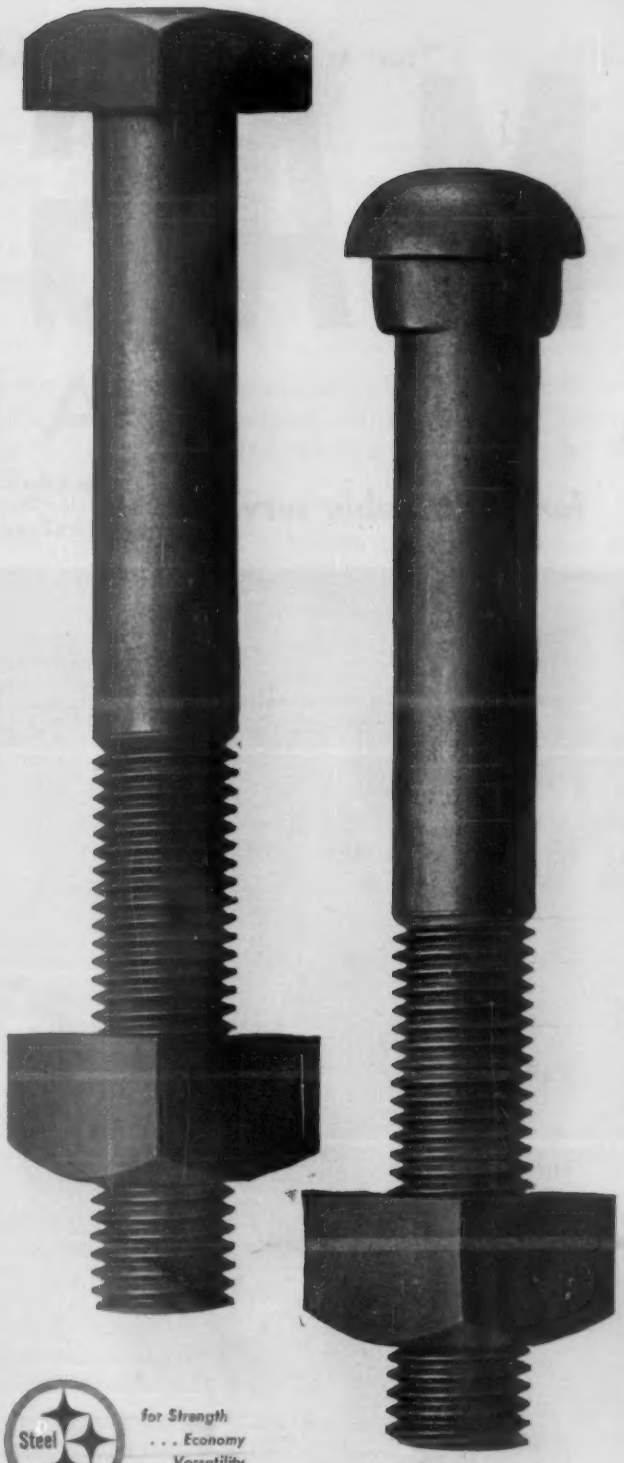

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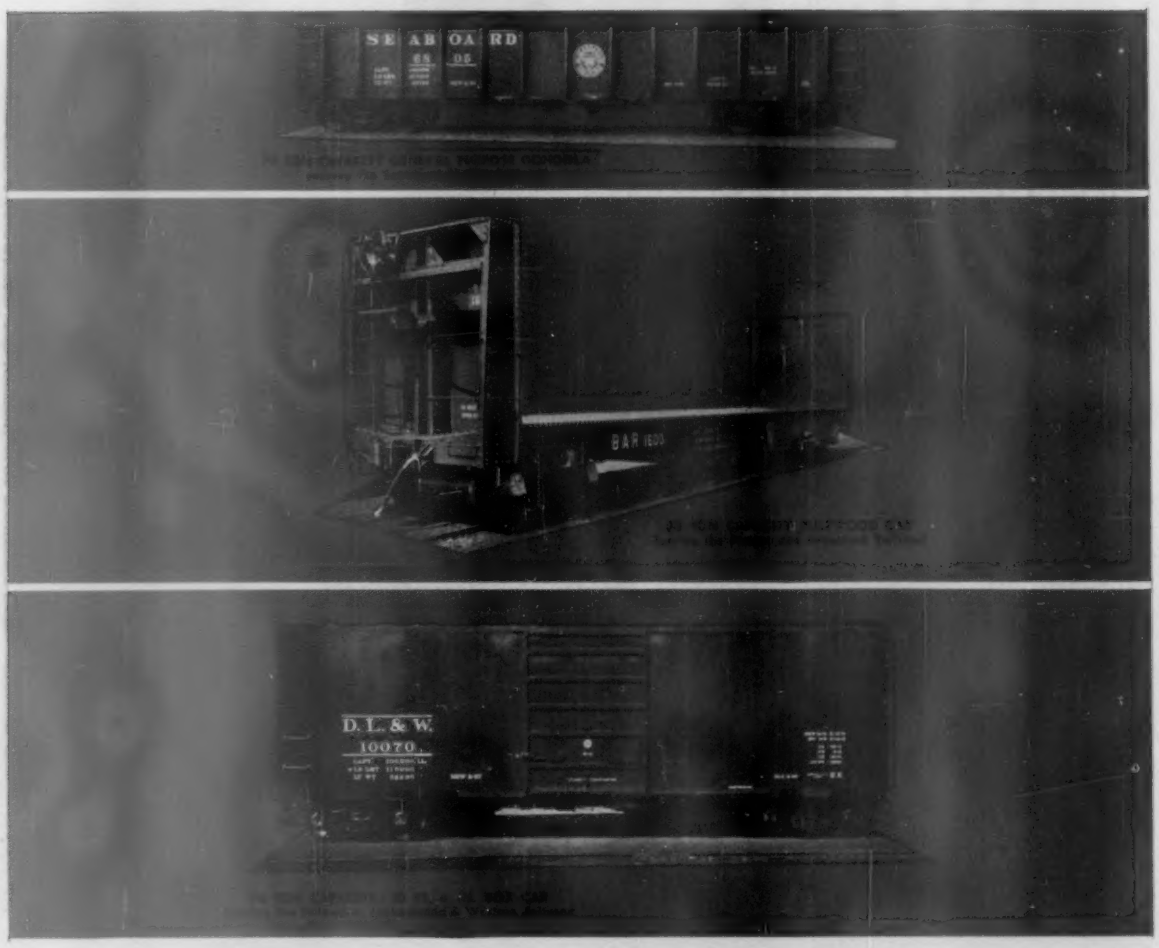


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RAILWAY AGE *weekly* November 28, 1960 • Vol. 149, No. 22

## Week at a Glance

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**ICC gets New Haven relief plan** ..... p. 9

The report of Commissioner Webb and Hearing Examiner Ries proposes, among other things, that the Commission be given the right to find local and state taxes unlawful when they constitute an undue burden on interstate commerce.

**Shippers support 'one-plan' TOFC** ..... p.17

A single comprehensive plan for piggyback carriage of truck trailers was favored by an almost 3-to-1 majority of respondents to this month's Traffic Poll. The big question is: How can such a plan be devised?

**Cover Story—Piggyback volume, revenues hit new peaks**..... p.22

Trailer-on-flat car operations were the brightest spot in the railroads' 1960 traffic picture. Trailers handled, and revenues received for handling them, reached new highs. There are indications that still further gains are in prospect.

**Cover Story—Why GSC turns to TOFC** ..... p.38

About 10% of General Steel Castings' outbound traffic moves in piggyback service. Piggyback, GSC often finds, is the answer to meeting rates and deliveries offered by competing forms of transport. The company believes its use of TOFC will steadily increase.

**New Burlington bridge clears river traffic** ..... p.58

The structure crosses the Mississippi at Quincy, Ill. The span over the channel has a clear height of 63 ft above water level, thus eliminating train delays formerly caused by river traffic.

**T&P builds special auto ramps** ..... p.65

The upsurge in new-automobile traffic has led railroads and railroad suppliers to develop special types of equipment and facilities to handle the traffic. The T&P, for example, has just completed two special terminal facilities at Dallas.

**NITL backs managerial rights** ..... p.82

The National Industrial Traffic League has endorsed "appropriate legislation" to assure railroad management the right to create or abolish specific jobs. Action was taken at the group's 53rd annual meeting in New York.

**The Action Page—TOFC: 'Too much guesswork'** ..... p.86

Piggyback traffic and revenues continue to grow. Piggyback, it is obvious, has a great future. It is imperative, however,

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## Week at a Glance cont'd

## Current Statistics

| | |
|---|---|
| **Operating revenues** | |
| 9 mos., 1960 | $7,210,476,221 |
| 9 mos., 1959 | 7,390,378,920 |
| **Operating expenses** | |
| 9 mos., 1960 | 5,723,495,009 |
| 9 mos., 1959 | 5,807,048,048 |
| **Taxes** | |
| 9 mos., 1960 | 781,301,223 |
| 9 mos., 1959 | 792,949,896 |
| **Net railway operating income** | |
| 9 mos., 1960 | 432,951,018 |
| 9 mos., 1959 | 547,919,151 |
| **Net income estimated** | |
| 9 mos., 1960 | 303,000,000 |
| 9 mos., 1959 | 393,000,000 |
| **Carloadings, revenue freight** | |
| 45 wks., 1960 | 26,999,938 |
| 45 wks., 1959 | 26,949,899 |
| **Freight cars on order** | |
| Nov. 1, 1960 | 22,900 |
| Nov. 1, 1959 | 36,199 |
| **Freight cars delivered** | |
| 10 mos., 1960 | 48,316 |
| 10 mos., 1959 | 32,063 |

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that it be built as a superstructure upon a foundation of strictly economic pricing of orthodox railroad service in standard equipment.

### *Short and Significant*

**$35.5 million mail-pay increase . . .**

will come to the railroads as a result of the ICC's approval of agreements between the Post Office and the carriers. The increases, retroactive to Sept. 1, are 8% for eastern roads and 13% for southern and western roads.

**Purchase by the T&P and the Rock Island . . .**

of a 90% interest in the Great Southwest (a 10-mile terminal and switching line between Dallas, Tex., and Fort Worth) has been approved by the ICC. Each will acquire 3,096 shares or 45% of Southwest's stock at a price of $133.08 a share.

**Russian railroaders . . .**

arrived in this country last week to begin a month-long inspection tour of U.S. railroads. The 10-man group is headed by B. Beschev, the Soviet Minister of Railroad Transportation Enterprise (RA, Nov. 7, p. 7).

**Two more AAR divisions . . .**

have cancelled 1961 annual meeting plans. They're the Mechanical Division, which had planned to meet in June, and the Purchases & Stores Division, which had scheduled its meeting for September.

**Southern stockholders approved . . .**

issuance of up to $33 million in bonds to provide funds for purchase of stock control of the Central of Georgia, also authorized issuance of additional bonds as may be required for purchase of other properties (RA, Oct. 17, p. 40).

**Piggyback is a wholly desirable . . .**

and economic transport tool, says an AAR statement filed with Maj. Gen. John P. Doyle, staff director of the Senate Transportation Study Group. The statement added that piggyback's growth and development should be encouraged in every way.

**Royalties of 35 cents to $1 a ton . . .**

will be paid to the International Longshoremen's Association on containerized freight moving through New York port. The new scale, agreed to last week, clears the way for wider use of containers by shiplines serving New York.

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# ICC Gets New Haven Relief Plan

► **The Story at a Glance: An extensive program to save the New Haven is recommended in a report which Interstate Commerce Commissioner Charles A. Webb and Hearing Examiner Richard S. Ries have submitted to the Commission.**

**Major phases of the program would be applicable to other roads faced with problems similar to those of the New Haven, the report suggests.**

**The program calls generally for a cooperative effort of everyone concerned to halt "the decline of a once-prosperous railroad"—a decline which "a management fully responsive to changing competitive factors might have forestalled."**

**Specific proposals call for tax relief, increased fares coupled with prompt improvements in passenger equipment, abandonment of unprofitable lines, better management of the railroad and its motor carrier subsidiary, better coordination of rail and truck services, a federal-assistance plan for the acquisition of passenger equipment, and possible legislation authorizing the ICC to find state and local railroad taxes unlawful as undue burdens on interstate commerce.**

The New Haven rehabilitation program recommended by Commissioner Webb and Examiner Ries came in the case (No. 33332) which the ICC started to investigate a commuter-fare increase and later broadened into a comprehensive probe of New Haven operations and practices as they affect its passenger services and rates.

The recommendation suggesting that the Commission consider seeking legislation permitting it to condemn state and local tax levies is put on an "if-it-becomes-necessary" basis. The report goes on to say that such necessity might arise under these circumstances: (A) that the railroad is operating at a deficit in either its freight or passenger service which imperils its survival; (B) that the continuance of the freight or passenger service provided by the carrier is required by public convenience and necessity; (C) that state and local taxes involved, in the light of all relevant circumstances and after a full hearing, are found to be excessive when compared with taxes assessed on the carrier's property by other states and communities through which the railroad operates.

In the latter connection, figures in the report show that state taxes per mile of road which were assessed against the New Haven in 1959 amounted to $1,668 in Connecticut, $2,532 in Massachusetts, $6,699 in Rhode Island, and $17,318 in New York. The report notes that New York has passed legislation which will reduce its levy in future years, and that similar legislation is being considered in Connecticut and Rhode Island.

Noting the New Haven's 1959 operating deficit of $10.8 million, the report anticipates that this year's net loss will amount to more than $14.3 million. The 1959 passenger deficit was $12.6 million, of which $6.2 million was attributed to commutation services. To rehabilitate the road and bring it back to a break-even point, about $35 million more per year is needed than it had in 1959, Messrs. Webb and Ries say. Because the annual fixed charges are only $6.6 million, they conclude that bankruptcy is not the solution.

A trustee would encounter many of the same problems management now faces, and elimination of all fixed charges would not end operating deficits, the report points out. It adds that "so long as all public and private groups concerned are convinced that the New Haven is an essential public utility which must be preserved, these groups have a better chance to develop a sound solution if there is no judicial overseer in the background."

Preservation of the road "cannot be made the exclusive responsibility of any individual or any single group of individuals," Messrs. Webb and Ries also say, expressing at the same time their own belief that NH "is still a vital artery of transportation."

The report notes that, when the present management took over a few years ago, "a disastrous flood and the follies of their predecessors" had nearly sealed the road's fate. It also notes that the road's condition was due in part to "excessive state and local taxation, to the discriminatory promotional policies of the governmental agencies, and to the shortsightedness manifested at times by patrons and by employees of the carrier."

Mistakes of the present management are found to have contributed to the deterioration in the road's financial condition. In that connection, Messrs. Webb and Ries emphasize that the inquiry turned up no suggestion of dis-

## McInnes Heads Erie-Lackawanna

M. G. McINNES

H. W. VON WILLER

Milton G. McInnes, 55, was elected president of the Erie-Lackawanna last week, succeeding Harry W. Von Willer, 64, who resigned for reasons of health. Mr. Von Willer will continue as chairman of the board, and Perry M. Shoemaker remains vice-chairman. The position of executive vice president, formerly held by Mr. McInnes, was abolished.

Mr. McInnes joined the Erie in 1930 as a dock clerk at the road's Duane Street freight house in New York City immediately following his graduation from Dartmouth. He advanced through various operating positions such as trainmaster, division superintendent and general manager. In 1951 he was vice president—operations and maintenance for the Erie system. He was named executive vice president of the former Erie in 1956, and was elected to the same position with the merged Erie-Lackawanna last month.

honesty on the part of any member of the present management group. They had in mind evidence showing "errors in judgment, lack of foresight, needless extravagance and poor planning."

As to meeting the competition, New Haven actions have been "marked by ill-considered and extravagant innovations, and by an indulgence in loud complaint and self-pity," the report says. It adds that a long-range plan for the road's future should have been started long ago but was not; and the present management appealed for "public help in the form of fare increases, tax relief and subsidy without giving any clear indication of what it proposed to do by way of self-help" until a plan for future operation was offered at the inquiry's hearing in response to Commissioner Webb's request (RA, Sept. 5, p. 10).

In emphasizing that no single group should now be expected to solve New Haven problems, the report has this to say:

"If the New Haven survives, it will be because of the cooperation of all groups concerned. If, on the other hand, the New Haven goes the way of the New York, Ontario & Western, it will be because one or more of the groups subordinated the public interest to its short-term self-interest.

"Management has no right to insist that its team remain wholly intact if other parties to the cooperative effort reasonably believe that the team can and should be strengthened. Commuters have no right to fares and employees have no right to indulge in work practices which would imperil the success of joint endeavor. Shippers in the area cannot reasonably expect the New Haven to survive if they use it only as a standby service or only for the hauling of less desirable classes of traffic.

"Fortunately, the notion that railroad treasuries are bottomless is fast disappearing. However, a remedy for the New Haven's empty till should not be concocted from the equally false notion that the federal treasury is inexhaustible. The commuter problem is essentially, but not exclusively, a state and local problem. Whatever form federal assistance may take, the

*(Continued on page 81)*

# Watching Washington *with Walter Taft*

• **PREDICTION** of George E. Leighty, chairman of the Railway Labor Executives' Association, is that the drive against "featherbedding" will eventually cost the railroads more than they save thereby. He bases this on expectations that "thorough study" of the matter by the commission to be appointed by President Eisenhower will show that payments of the "featherbedding" type do no more than partially offset "gross discrepancies" between wage-and-rules agreements on the railroads and like contracts in other industries.

**THE RLEA CHAIRMAN** points out that the railroad agreements with operating employees do not provide for extra compensation like night differentials, premium pay for overtime and holiday work, and allowances for away-from-home expenses. He says such provisions would surely enter op agreements if the Presidential commission should recommend major changes in the present set-up. And he thinks the latter may well be cheaper for the carriers.

**RLEA'S NEW** legislative program could include proposals to require tighter labor-protection conditions in merger cases, and to permit strikes to enforce demands in grievance cases within the jurisdiction of the National Railroad Adjustment Board. While nothing definite has shaped up on these issues, Mr. Leighty says they are matters of major concern to RLEA, which has committees considering them.

**THE GRIEVANCE-CASE ISSUE** has been to the fore since the U.S. Supreme Court's 1957 decision in the Chicago River & Indiana case. The court's ruling was that procedures of the adjustment board comprise a plan for "compulsory arbitration," and the Norris-LaGuardia Act does not prohibit issuance of court orders enjoining strikes in the "minor dispute" cases involved.

**SOMETHING HAS TO BE DONE** to expedite settlement of these grievance cases, Mr. Leighty says. He thinks management has been getting "tougher" about them by insisting on full hearing of each case and refusing to relieve the backlog by accepting what the unions consider precedent decisions. While he can't say yet what RLEA's approach will be, the chairman thinks it "possible" that amendments to the Railway Labor Act might be proposed.

**LEGISLATIVE HISTORY** of that act was given major consideration by the court as it made the ruling which RLEA doesn't like. The decision cited Congressional hearings where the court found discussions indicating that union representatives understood they were accepting procedures for final settlement of the grievance cases.

**THE LABOR-PROTECTION ISSUE** is pointed up in the Erie-Lackawanna case. The Brotherhood of Maintenance of Way Employees has taken this case to court. Its complaint alleges that labor-protection conditions imposed by the ICC when it approved the merger were short of what is required by the Interstate Commerce Act.

**THE COMPLAINANT'S CONTENTION,** which is also RLEA's position, is that a job-freeze is required, and thus the Commission violated the act when it left Erie-Lackawanna the alternative of giving severance pay to employees affected. While refusing to delay the merger, the court has frozen the employee set-up pending disposition of the case.

**PRESUMABLY,** the RLEA committee considering this matter will await the court's final decision before it determines whether to recommend amendments to the act's consolidation provisions. Mr. Leighty now says only that the matter will require considerable study by the committee.

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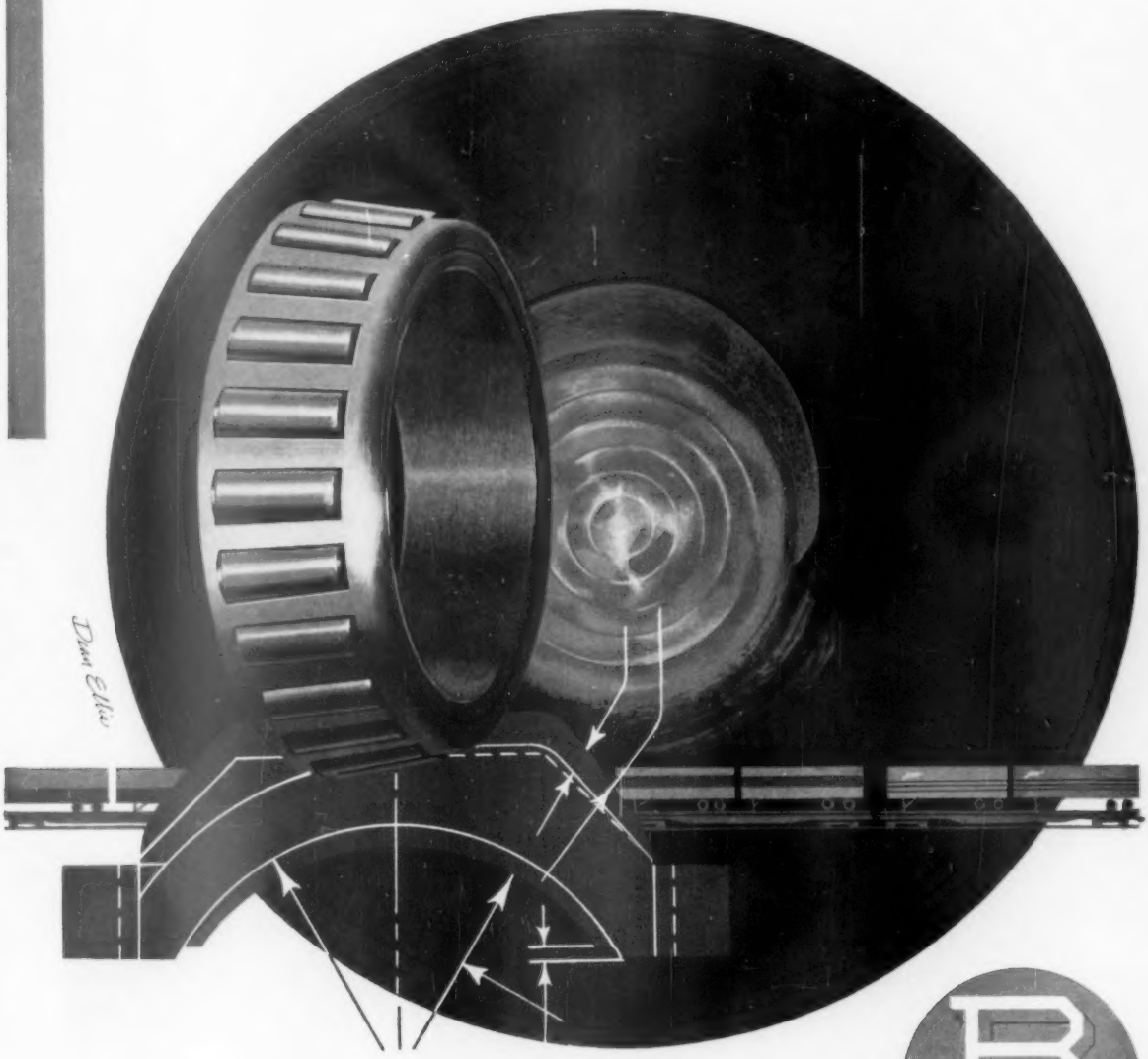


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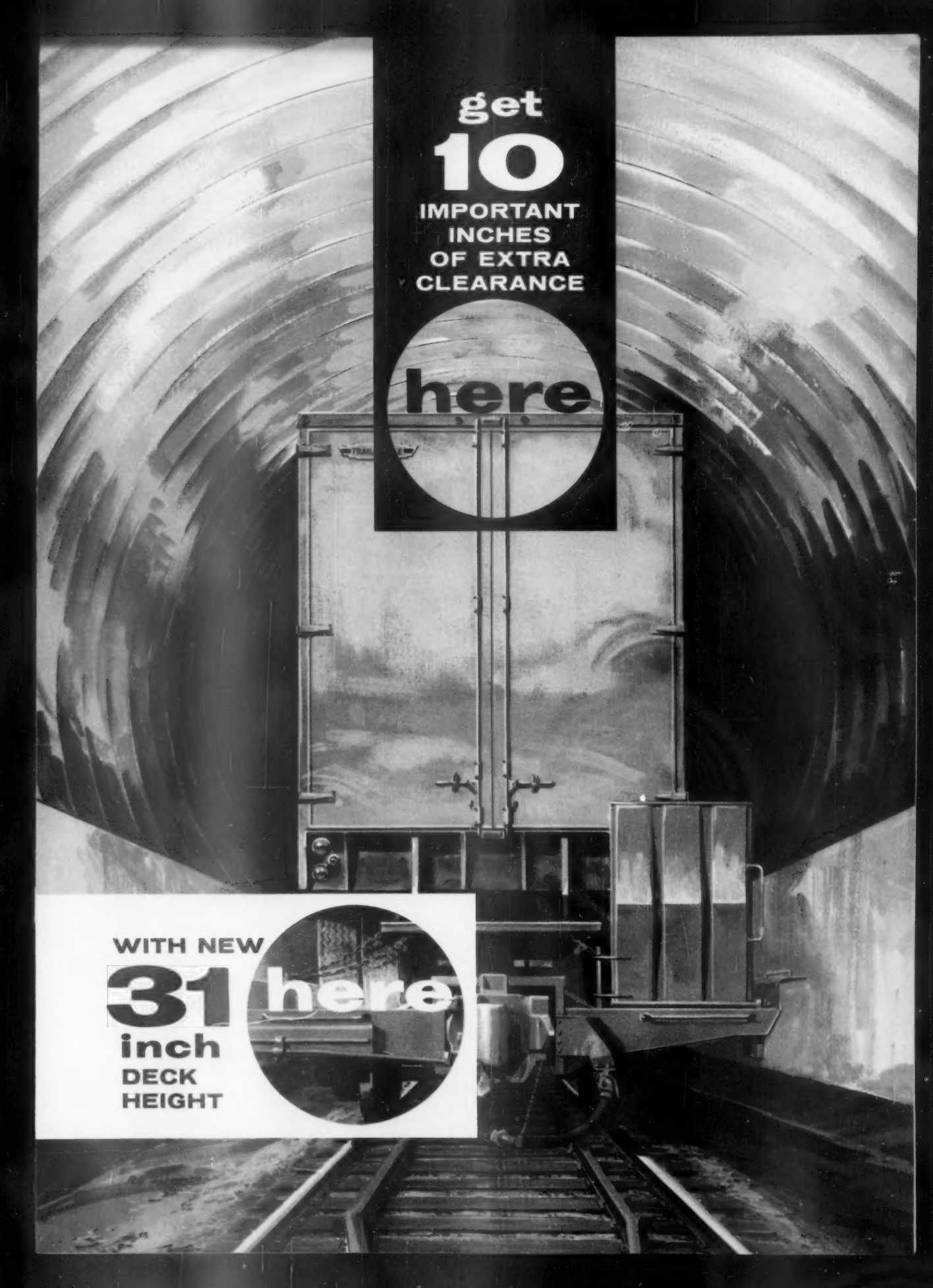
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Here's important news for piggyback shippers and carriers whose trailers are caught in a clearance squeeze. The all-new Pullman-Standard Lo-Dek Flat Car is designed to ease the squeeze by providing a big extra 10 inches of clearance. With deck height only 31 inches above the rail, the P-S Lo-Dek is 10 inches lower than conventional 85-foot flat cars and several inches lower than *any other* piggyback car on the market. This 10-inch lower profile means that many critical clearance problems can be solved and broader use made of high cube 13′-6″ trailers, letting railroads offer improved piggyback service to their shippers.

The new P-S Lo-Dek is one of the most thoroughly tested cars ever to join the Pullman-Standard line of rolling stock. Over two years have been devoted to developing and testing this remarkable innovation . . . making sure both in laboratory and in service that the Lo-Dek Flat Car meets the demanding requirements of the railroads, their shippers and Pullman-Standard, the world's largest builder of rolling stock.

The resulting Lo-Dek design offers the lowest profile, lowest center of gravity, greatest amount of clearance and lightest weight consistent with safety and stability. Not only lower in profile, the Lo-Dek is also lower in weight and lower in initial cost than other cars designed for piggyback service.

Users are also finding that the P-S Lo-Dek Flat Car is ideally suited for hauling highway auto transports or use with demountable auto racks, adding another dimension to the ways in which railroads can provide better service for their shippers.

**LIGHT WEIGHT** . . . Constructed of high-strength steel with carefully engineered and tested components, the P-S Lo-Dek Flat Car weighs approximately 52,000 pounds . . . 30% less than conventional 85-foot flat cars.

**ECONOMY** . . . Low initial cost means original purchase economy, while design and fabrication excellence provide the economies of minimum maintenance. Additionally, light weight construction eliminates approximately 20,000 pounds of unnecessary weight per car. *This means 250 tons less dead weight are hauled in a 25 car consist . . . an important operational economy for the railroads.*

**STRENGTH** . . . The P-S Lo-Dek is built for strength without excess weight using new unitized construction. Strong, fish belly design center sill, full length floor stringers, all steel deck and combination side sills and rub rails are arc-welded into one unit, providing light overall car weight without sacrificing car strength.

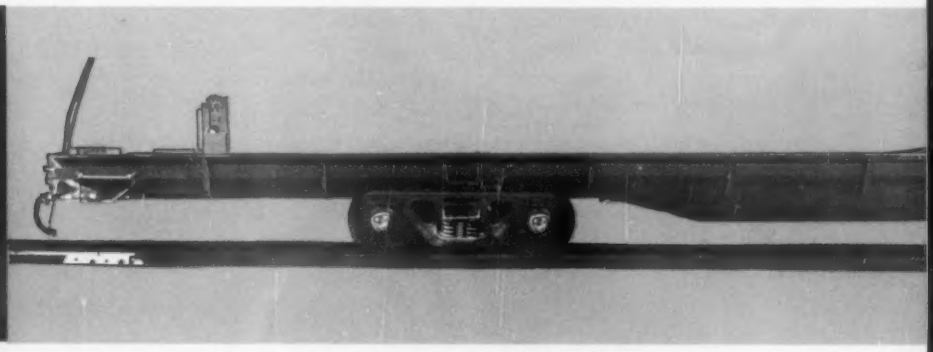
**CAPACITY** . . . The new P-S Lo-Dek accommodates loads up to approximately 127,000 pounds . . . the low profile permits the hauling of high cube 13'-6" high trailers or fully loaded highway auto carriers in heretofore inaccessible areas. And the 87-foot length of the Lo-Dek accepts two 40-foot trailers with room to spare.

**COMPATIBILITY** . . . Standard height couplers and slight inclines at each end of the Lo-Dek allow compatible end loading between Lo-Dek and conventional piggyback cars. Presently adaptable to auto racks, future plans for the Lo-Dek Flat Car include provision for container transporting.

# car broadens piggyback service

*economy...*

*compatibility*



**P-S LO-DEK FLAT CAR SPECIFICATIONS**

| | | | |
|---|---|---|---|
| Length over end sills and platform | 87'-4" | Height, rail to top of floor (empty) | 31¼" |
| Length over strikers | 88'-0" | Height, rail to center plate | 1'-8⅛" |
| Length center-to-center of trucks | 62'-0" | Height of rub rail from floor, maximum | 8" |
| Width between rub rails | 8'-2" | Approx. weight (with stanchions) | 52,000 lbs. |

Specifications subject to change without notice.

PATENTS APPLIED FOR

**THE PS-4PB FLAT CAR . . . STANDARD OF THE PIGGYBACK FLEETS**

The service-proved and accepted PS-4PB continues to be the standard of the piggyback fleets. Available only from Pullman-Standard, more than 2600 of these standard height (41½" rail to deck top) PS-4PBs are in service or on order. Extensive Pullman-Standard carbuilding facilities continue to assure prompt delivery of this popular 85-foot piggyback flat car.

# P-S LO-DEK

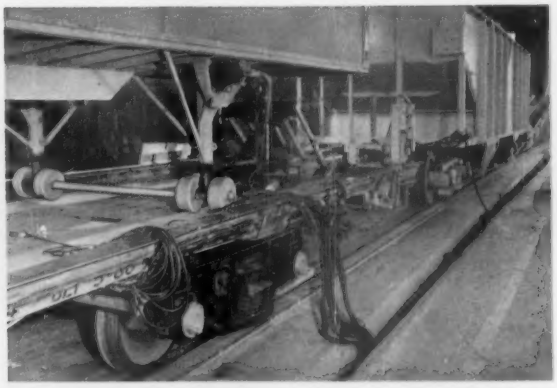
## two years in proving

The P-S Lo-Dek Flat Car has been laboratory and service tested over two years . . . more laboratory testing than any car in the thoroughly tested and proved P-S equipment line.

Static tests and rolling load tests measured stresses. Ninety-eight individual impact tests at increasing speeds, up to 10.1 mph, with varying and extreme load heights and weights tested car structure and a specially designed P-S Stanchion. Impact testing of this new P-S Stanchion was so severe that special "billet buggies" were substituted for standard trailers to withstand the collision level impacts absorbed by the Lo-Dek car and stanchion.

Years of bruising service were capsuled into accelerated laboratory testing. Nearly 25,000 test recordings of various speeds, stresses, strengths and other reactions were studied, measured, considered and evaluated. Experienced researchers and engineers put every result through microscopic inspection. Modern electronic equipment was heavily employed to aid mathematical calculations, prove and reprove theories and hasten development. All the forces of Pullman-Standard's Research and Development facilities, the largest in the industry, were brought into play to aid and prove car design. Areas of car inadequacies were quickly and surely corrected.

The end result . . . a new, but proved car design, the P-S Lo-Dek Flat Car, now ready to provide you with new and increased piggyback service and economy.



PATENTS APPLIED FOR

LEADER TO PROGRESS RPI MEMBER

PULLMAN-STANDARD

A DIVISION OF PULLMAN INCORPORATED
200 S. MICHIGAN AVENUE, CHICAGO 4, ILLINOIS
BIRMINGHAM • PITTSBURGH • NEW YORK
J. C. FENNELLY CO., WEST COAST REPRESENTATIVE

15-236

# Shippers Support 'One-Plan' TOFC

## Proposition

**Railroads now offer trailer-on-flat car service under five* different plans—two for shipper trailers and/or cars; two for common carrier truck trailers; and one for railroad trailers. It has been suggested that these five plans might be consolidated into one. This, presumably, would mean that point-to-point line-haul transportation of trailers would be made available to any shipper or any trucker under essentially similar terms, conditions and rates for essentially similar services. There might, of course, be allowances below the basic line-haul rate when shippers or truckers furnish equipment or perform pick-up and delivery; or extra charges above the basic line-haul rate when railroads provide equipment or local transportation.**

## Questions

**1) Would you consider it desirable to work out a single, comprehensive piggyback plan?**

| | |
|---|---|
| Yes | 33 |
| No | 13 |

**2) Assuming that a single plan could be developed, on terms fair to all parties concerned, would you prefer such a single plan to the present variety of plans?**

| | |
|---|---|
| One plan | 31 |
| Several plans | 11 |

By an almost 3-to-1 majority, shippers responding to this month's Poll said they would like to see railroads try to work out a single comprehensive plan for piggyback carriage of truck trailers, in lieu of the variety of plans under which that service is now provided. Some answers, however, were qualified by statements to the general effect that a single plan, though desirable in theory, might prove impossible in practice.

The strongest appeal of some single plan lies in what P. J. Berst, traffic manager, Continental Rubber Works, Erie, Pa., tersely describes as "simplification." Others express the same basic thought in different words.

O. G. Wagner, assistant traffic manager, Colonial Sugars Co., New York, thinks it would lead to simpler rates and tariffs. R. L. Henderson, traffic manager, Simoniz Co., Chicago, feels it would be "less complicated and less technical, and provide broader service." H. H. Kohn, traffic manager, Linwood Stone Products Co., Davenport, Iowa, believes one plan "would reduce confusion and misunderstanding in a new and growing transportation idea . . . Too many plans in years to come will result in as much confusion as we now have with freight rates and tariffs." And C. H. Schmidt, GTM, Stokely-Van Camp, Indianapolis, suggests that a single plan would "greatly simplify" the present "confusing" set-up.

"Simplicity," adds A. S. Daviau, traffic manager, Mennen Co., Morristown, N. J., would lead to better understanding and thus "reduce the tendency to misuse—from the legal standpoint—the various existing plans."

Simplification, other respondents point out, might induce more shippers to use the service. "Multiple plans are hard to explain to the smaller shipper," says R. M. Stadick, general traffic manager, Electric Storage Battery Co., Cleveland. "One plan," he adds, "could be easily handled by all shippers, large or small." In the same vein, K. L. Sodergren, GTM, Gustin Bacon Manufacturing Co., Kansas City, Mo., points out that shippers could "select the type of piggyback service they need without the difficulty experienced today due to its confused state and lack of coordination."

Carriers as well as shippers would benefit from greater uniformity, in the opinion of a number of western respondents. The point gets special emphasis from W. G. Koplin, traffic manager of the Salt Lake Hardware Co., who thinks "consolidation of the five plans, with full participation by all railroads, through service and rates, would be highly desirable."

H. G. Armstrong, assistant director of traffic, General Mills, Minneapolis, thinks a single plan would result in making more long-haul, joint-line service available. "Non-uniformity" between carriers on present plans tends, he believes, "to discourage anything but single-line carriage."

As a possible added advantage of a single plan, Howard Pollen, traffic manager, P. Ballantine & Sons, Newark, N. J., and R. L. Andreas, manager, traffic department, Standard Oil of Indiana, at Chicago, both see "less opportunity for preferential treatment or discrimination."

Some exponents of the one-plan idea do, however, foresee some possible disadvantages. "Claims," says Mr. Wagner, "could become a problem if all freight moved on a flat cost per trailer basis." While uniformity between carriers would be advantageous, it might result in disregarding "particular needs of certain industries," says G. E. Roeder, TM, Portland (Ore.) Produce Merchants Association. And Mr. Armstrong feels a single plan

(*Continued on page 51*)

### How 'One-Plan' TOFC Might Work

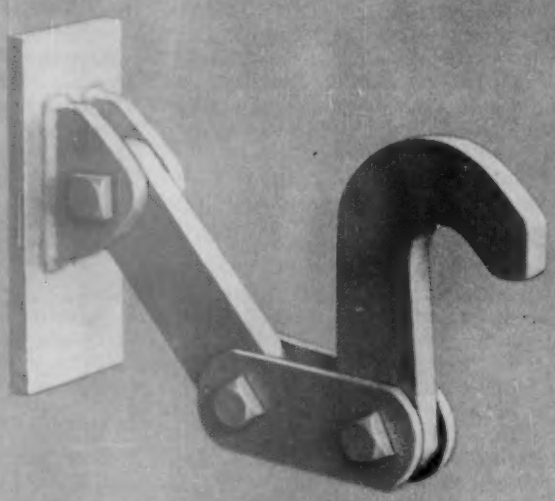
"Tariff rate should be based on the best ascertained cost plus a reasonable profit, and cover only the base service, with additional charges over the base rate to apply if: a) carriers furnish cars; b) carriers furnish cars and trailers, with different rates for different types; c) carriers perform pick-up and/or delivery. In this fashion, one tariff could cover the base rate for the commodity, and user could add as much additional service as he needed, e.g., pick-up by carrier-owned tractor at origin, use of carrier flat car, delivery and return to carrier by receiver's own tractor."—*A. C. Roy, director of traffic, Pennsylvania Glass Sand Corp., Pittsburgh.*

"It would be just like it is now. For every variation, there are different charges. On services in effect you now have one plan (TOFC) but with variations. Instead of saying you have different charges for different services on TOFC transportation, it is called different plans."—*D. C. Ward, traffic manager, Hoerner Boxes, Keokuk, Iowa.*

*A few railroads also offer what is designated as Plan VI—movement in railroad trailers of less-carload freight.

# WHICH IS

## EVERY PIGGYBACK A TOOL. LET'S



## TOOL FOR G-85 HITCH

Type:
Simple hook attached to yard tractor

Cost:
$135—*nothing else needed*

Tie-down-time:
30 seconds per trailer

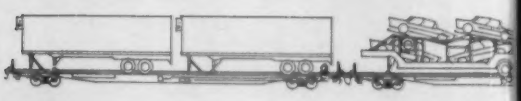
Unloading time:
20 seconds

Operator:
One man (from inside the tractor cab)

Tie-down principle:
Driver backs trailer into position and releases hook. Hook engages hitch and pulls it into position automatically. Tractor nudges trailer into lock position. *Nothing else needed.*

Unloading principle:
Driver backs tractor into position; couples air-lines, backs tractor to trailer—this automatically disengages and lowers hitch and engages trailer. He then drives off. *Nothing else needed.*

Manual operation:
If hook is not available, tie-down can be accomplished manually in less than 9 minutes . . . *unloading still only 20 seconds.*



Piggy-Back GENERAL AMERICAN TRADE MARK

PIGGY-BACK DIVISION
**GENERAL AMERICAN**
*135 South LaSalle Street*
*Chicago 3, Illinois*
*Offices in principal cities*

# BETTER?

## HITCH REQUIRES COMPARE . . .

## TOOL FOR OTHER HITCHES

**Type:**
Pneumatic or electric wrench plus hose or cable and power supply

**Cost:**
$375—$600 each plus air lines or cable and power supply attachments

**Tie-down time:**
2½ minutes per trailer is minimum claimed

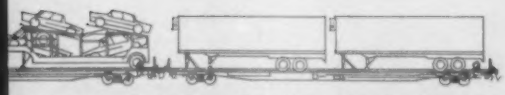
**Unloading time:**
2½ minutes per trailer is minimum claimed

**Operators:**
Minimum of two (man in tractor cab plus wrench operator)

**Tie-down principle:**
Driver backs trailer into position. Man climbs on car, adjusts trailer landing gear and bleeds brakes in rear of trailer. Then he returns to front of trailer, engages wrench and elevates hitch into position. Man must then disengage wrench, reposition it and re-engage it to operate kingpin lock.

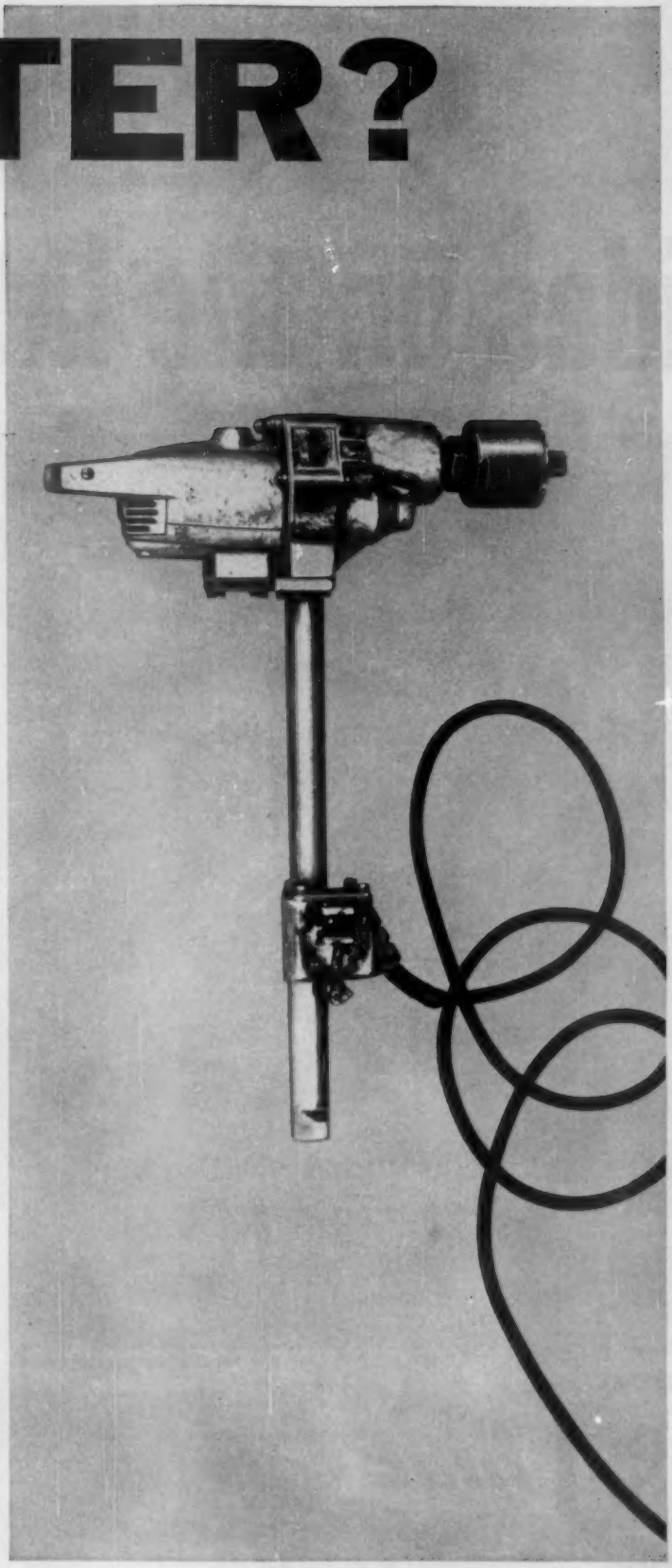
**Unloading principle:**
Yard man brings over wrench and cable and operates unlocking mechanism. He repositions wrench to lower hitch and then closes air valve on trailer brakes and climbs off car with wrench. Driver backs tractor into position, couples airlines, builds up brake pressure on trailer and drives off.

**Manual operation:**
If wrench motors burn out, pneumatic lines freeze or power fails tie-down takes about 30 minutes manually . . . manual unloading takes 30 minutes as well.



*The Piggyback Cars You Have Are Good . . . but for the standout, look to the G-85.*

**TRANSPORTATION CORPORATION**



# Newest in Piggy—

# Rides on the latest ASF

New low profile ASF Ride Control Truck developed to order for Pullman-Standard's new Lo-Dek* Flat Cars.

ASF **Ride Control®** **Truck**

*Patents applied for.

**AMERICAN STEEL FOUNDRIES . . .**

# -Back Flat Cars

# truck development!

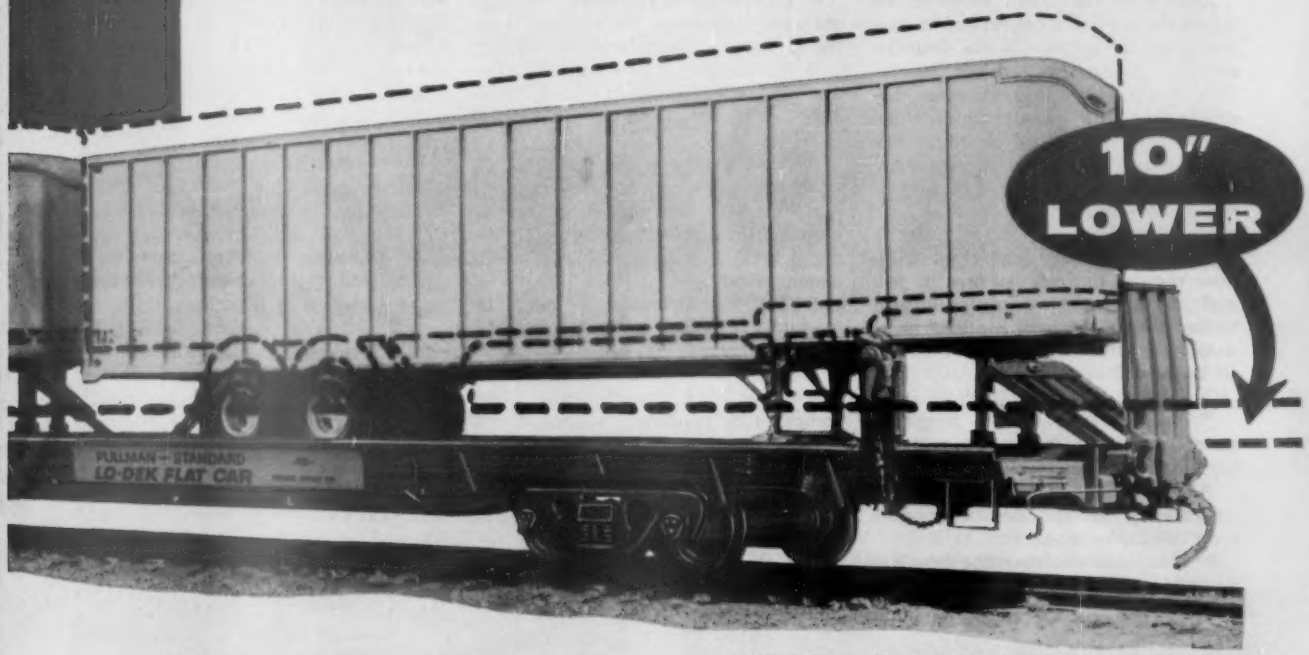
## Special ASF Ride Control® Trucks assure best ride for goods in trailers aboard the new PULLMAN-STANDARD LO-DEK* FLAT CARS.

Development of this novel car by Pullman-Standard was greatly facilitated through the co-operation of ASF specialists in the development of the truck while Pullman-Standard engineers concentrated on the car structure. The truck so developed is a low profile variant of the one that made modern high speed freight service possible, the ASF *Ride Control* Truck.

A host of outstanding advances in railroad equipment owe their existence to ASF research and engineering. Included are scores of modern improvements in trucks, brakes, couplers, and other railroad running gear components. Many of these "better ways," like the new low-profile ASF truck, were developed to order for projects which would not have been feasible without them.

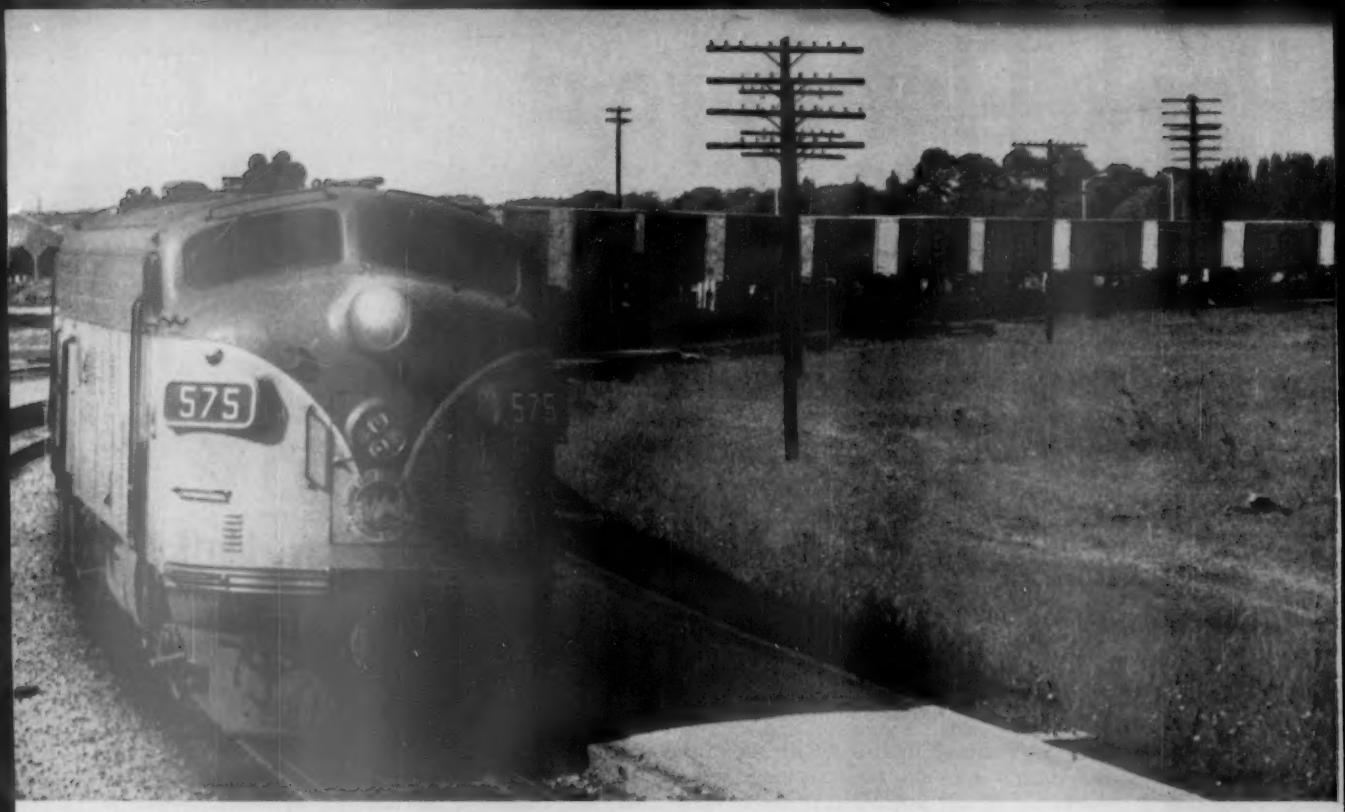
In fact, the specialized research and engineering facilities which serve ASF so well are always available to help our customers solve their problems. Write direct for further information.

This illustration shows the Lo-Dek Car in comparison with the dotted outline of a standard 85 foot car . . . a height reduction of 10 inches. This substantial difference should aid materially in overcoming low clearance limits which have handicapped or prevented Piggy-Back development in some areas.




. . . . Prudential Plaza, Chicago 1, Illinois

Canadian Manufacturer and Licensee: International Equipment Co., Ltd., Montreal 1, Quebec
Other Foreign Sales: American Steel Foundries, International, S. A., Chicago




SOLID PIGGYBACK TRAINS, like this on the FEC, will become more common as traffic grows.

# TOFC Traffic, Revenues Reach

► **The Story at a Glance: Trailer-on-flat car operations were, without much doubt, the brightest spot in the railroads' 1960 traffic picture.**

**Trailers handled, and revenues received for hauling them, soared to new peaks—partly because of the dramatic upsurge in new-automobile traffic. There were multiplying indications that still further gains are in prospect, either from breakthroughs into handling other types of traffic still new to piggyback, or from increased emphasis on moving wheel-less containers as well as conventional trailers.**

**Admittedly, some unresolved questions remain. But railroad men in general are modestly optimistic in their feeling that TOFC will continue to be a steadily more important contributor to traffic and earnings.**

By all statistical indices, piggyback transportation of freight by rail registered another handsome gain in 1960.

Along with the pleasing figures (and contributing in part to them) were such developments as:

- Continued mushrooming growth of new-automobile TOFC transport, which since its inception in early 1959, has returned to railroads in every part of the country traffic they had all but lost to highway and water carriers;
- Completion of piggyback's national geographic coverage, by entrance into the field of the giant Southern system;
- Increased use of overhead cranes for side loading and unloading of trailers or containers from any point in a train; and
- Modest progress in transport of wheel-less containers.

Behind the year's satisfactory figures, however, some potentially nagging questions were beginning to take form. Among them:

Is TOFC contributing as much to railroad net income as it is to railroad tonnage?

Is further development of the popular and fast-growing Plan III going to be hampered by regulatory action?

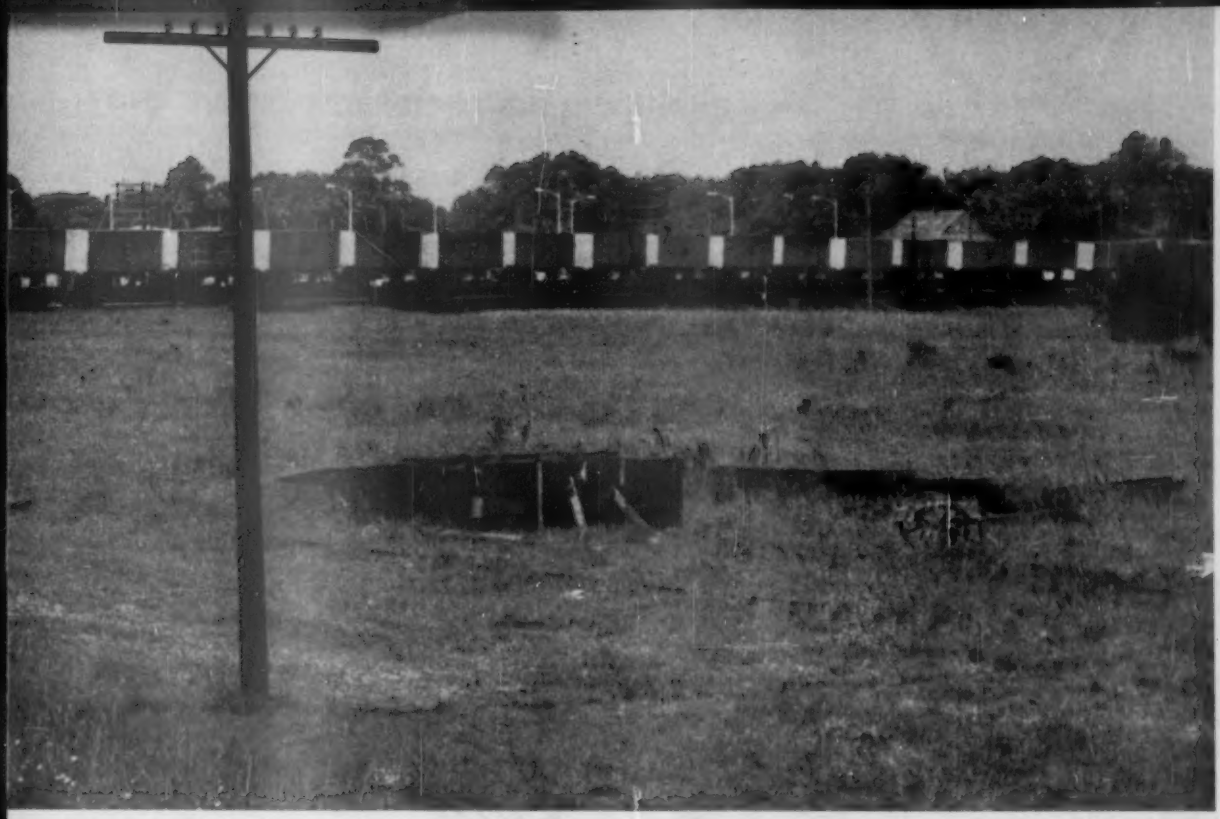
Does the most promising future lie in continued transport of wheeled trailers—or should emphasis be shifted to movement of wheel-less containers? Are containers, in other words, a potential ally of, competitor of, or substitute for, conventional trailers?

Those questions are not being ignored, but it will take time to produce some definitive answers. Meanwhile, railroad men in general appear to be well pleased with what piggyback is currently doing for the industry. There is conviction that TOFC has returned to the rails a lot of traffic which had been temporarily lost, and is holding on the rails a lot more which would have been lost without piggyback.

Here's what the figures show:

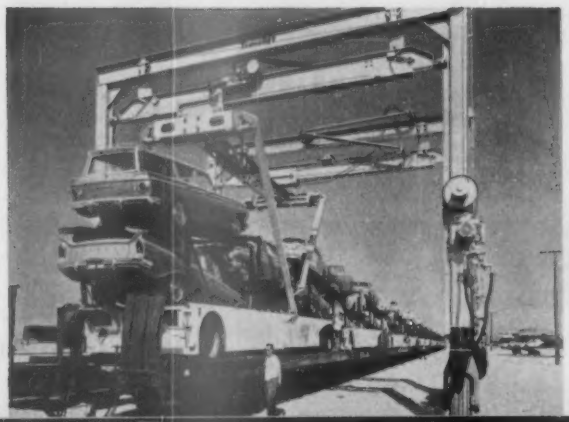
- In the first 44 weeks of 1960, through Nov. 5, railroads loaded 473,892 cars with highway trailers, Flexi-Vans or other truck-type containers, and bi- and tri-level auto racks—which the Association of American Railroads reports as piggyback loads. Auto transport accounted for a substantial part of the over-all increase.
- This 473,892 44-week figure was an increase of 120,999 cars, or 34.29%, over the 352,893 TOFC cars loaded in the comparable weeks of 1959. Projected for the full year, it would indicate total 1960 loadings between 550,000 and 560,000 cars, against 415,156 in 1959.

(*Continued on page 25*)



# New Highs as Autos Roll by Rail

▲ **HEAVY MOVEMENT OF NEW AUTOMOBILES** helped 1960 set new records for TOFC traffic and revenues. Autos were moved in conventional trailers (left) and special newly-developed rack cars (above). The latter are still considered, by the AAR, as piggyback loads, but subject is under study.



◀ **ONE OF** the year's technical developments was increased reliance on overhead straddle cranes, of the Travelift type, to replace circus loading of piggyback cars. C&NW went so far as to handle auto trailers this way. Such cranes can also handle wheel-less containers—if the need arises.

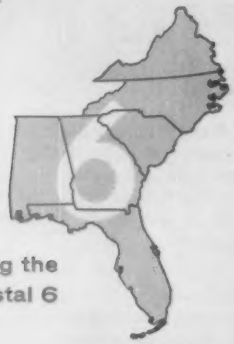
# Speedy...
# Specialized...
# and Safer, too!

THE AMERICAN MUSEUM OF SAFETY
THE E. H. HARRIMAN MEMORIAL MEDAL
GOLD MEDAL
ATLANTIC COAST LINE RAILROAD COMPANY
( INCLUDING CHARLESTON & WESTERN CAROLINA RAILWAY COMPANY )
IN RECOGNITION OF ITS OUTSTANDING SAFETY RECORD
CLASS A RAILROADS

**with Coast Line, winner of the year's E. H. Harriman Gold Medal Award!**

Fast attention to shipping needs, special cars and trailer train flexibility are just part of Coast Line's services to shippers—there's also the extra safety that has earned railroading's highest honor for the second time in the last five years.

We're happy to offer to all shippers this same kind of safe, efficient transportation. And we're always ready to demonstrate what Coast Line care can mean to you.



...serving the Southeast Coastal 6

ATLANTIC COAST LINE RAILROAD

*"Thanks for Using Coast Line"*

## TOFC TRAFFIC, REVENUES REACH NEW HIGHS (*Continued from page 23*)

It is more difficult to determine, or forecast, the number of trailers handled. On the one hand, the growing proportion of long two-trailer cars in the piggyback fleet would indicate that trailers handled should have shown a larger increase than number of cars loaded, with a probable average of about 1.5 trailers per car against 1.4 in 1959. On the other hand, inclusion in TOFC figures of auto racks—which are not trailers in the ordinary sense—might well produce a contrary result. It seems safe to assume, however, that the number of straight trailers hauled in 1960 will exceed 800,000—probably by a wide margin—compared with around 580,000 last year.

In percentage terms, the 44-week increase in piggyback carloadings between 1959 and 1960 was only about two-thirds the rate of growth recorded between corresponding periods of 1958 and 1959. The reason is that 1960 gains had to be measured against 1959's larger base. (Percentage growth may, in fact, be expected to show a similar declining trend in the future.)

Significantly, however, the number of individual piggyback cars loaded showed almost exactly the same unit increase between 1959 and 1960 as it did between 1958 and 1959.

Significantly, too, 1960's gains are being scored in a year when total loadings of all freight have shown virtually no increase at all; those in 1959 were registered against the background of a small upswing in all loadings. Without piggyback, in other words, total 1960 carloadings would undoubtedly have been substantially smaller than in 1959; 1959's total, without piggyback, would still have been a little bigger than 1958's.

With rare exceptions, railroad men appear firmly convinced that 75% or more of all piggyback traffic is "recaptured" business, i.e., business which had been moving by highway prior to the advent of TOFC service. This "recapture" figure on individual railroads runs as high as 90%; the lowest estimate uncovered by a Railway Age editor in a series of field interviews was 50%. Moreover, railroaders say emphatically, the "25, 10 or 50%" of TOFC business which may have been diverted from former rail box-car movement is traffic which was subject to truck diversion, and which the rails might have lost, sooner or later, without piggyback.

Equally encouraging, revenue from TOFC service appears to be increasing at a somewhat faster rate than the number of cars loaded, or number of trailers handled. While no definitive figures are available, 24 out of 36 railroads replying to a special Railway Age questionnaire reported the following combined totals for the first six months of this year and last:

| | Jan.-June 1960 | Jan.-June 1959 | % Increase 1960 over 1959 |
|---|---|---|---|
| Trailers handled ... | 361,226 | 245,539 | 44.66 |
| Revenue received ... | $41,931,931 | $25,561,625 | 64.17 |

Traffic and revenue growth has not been uniform between railroads. At least two of the smaller piggyback carriers, in fact, handled fewer trailers or collected less TOFC revenue in the first half of 1960 than in the comparable period of 1959. On the other hand, at least six roads reported increases of more than 100% in trailers or revenues or both, and four others did nearly as well.

The Wabash leads in percentage of gross freight revenue derived from piggyback; its figure is 7%. From that maximum, percentages run down almost to zero. The most common figure cited by railroads is between 1.5 and 2.5%.

To produce the piggyback carloadings and revenues thus analyzed, railroads handle (or are gunning for) just about any commodity that can be stowed in or on a trailer. A partial list—and it is only partial—includes such items as household appliances, chemicals, automobiles and automobile parts, fresh fruits, fresh meats and poultry, fresh vegetables, frozen foods, canned goods, glassware, iron and steel articles and manufactured products generally.

To accommodate such freight, the railroads answering Railway Age's inquiry own or lease approximately 12,000 specially-equipped flat cars, and some 11,500 trailers, including about 8,000 closed trailers, 1,300 flat beds, more than 1,000 open tops, and better than 1,100 refrigerated units. They have on order or plan to buy or lease close to 1,200 additional trailers.

Those figures, of course, don't tell the whole equipment story, because they don't cover all railroads; because some piggyback cars are owned or leased by shippers (particularly freight forwarders); and because a substantial number of trailers are owned either by shippers or by truck lines participating in Plans I and V.

To handle TOFC traffic, railroads provide five generally recognized "plans"—with many carriers offering more than one, and some doing business under all five. These plans, and the number of responding roads participating in each, are:

Plan I (26 roads)—Rail transport of motor common carrier trailers.

Plan II (39 roads)—Rail transport of rail trailers.

Plan III (39 roads)—Rail transport of shipper trailers.

Plan IV (28 roads)—Rail transport of shipper trailers on shipper cars.

Plan V (24 roads)—Rail transport of motor common carrier truck or rail trailers, under joint rail-truck rates.

A few railroads, notably the Great Northern, Union Pacific and New York Central, also offer what is sometimes described as Plan VI, i.e., use of rail trailers to handle less-carload freight in TOFC service in lieu of box cars in regular service. A typical operation of this type is the UP's overnight service between Los Angeles and Las Vegas, in which 20-ft trailers, loaded in destination delivery-route order, are handled three to a flat car and moved between the two terminals in better-than-highway time. Current traffic is averaging about 18 trailers, or six carloads, per night. The GN has much the same set-up between the Twin Cities and such overnight destinations as Fargo, N.D.

It's comparatively easy, in any gathering of railroad men or shippers, to start an argument on the relative values of the various plans—particularly as between I and II—but probably, as a southwestern traffic executive wrote Railway Age: "Each has its own merits and is advantageous to certain shippers based upon their individual requirements."

The relative positions of the five general plans are indicated in the accompanying table, which is based on replies from 24 railroads handling 48% of all reported trailer loadings and collecting 60% of all reported TOFC revenues. (*Continued on page 26*)

**TRAILERS HANDLED and REVENUES RECEIVED under different plans of piggyback**

| Plan | TRAILERS Number | TRAILERS % of Total | REVENUES Amount | REVENUES % of Total |
|---|---|---|---|---|
| I | 48,644 | 24.9 | $ 4,715,754 | 15.7 |
| II | 91,713 | 46.9 | 16,603,636 | 55.3 |
| III | 23,104 | 11.8 | 2,190,899 | 7.3 |
| IV | 18,592 | 9.6 | 2,784,532 | 9.2 |
| V | 13,965 | 6.8 | 3,752,100 | 12.5 |
| Totals | 196,018 | 100.0 | $30,046,921 | 100.0 |

## TOFC TRAFFIC, REVENUES REACH NEW HIGHS (*Continued from page 25*)

The table shows that, as of now, Plan III is least important, from the revenue standpoint; Plan II is much the most important on any count. But 20 railroads, answering another question, said Plan III was growing most rapidly—just as Railway Age predicted a year ago. Only one railroad, by contrast, put Plan II in the "fastest growing" category. On the same basis, Plan IV drew four votes; Plan I, four votes, and Plan V, one vote, with one divided between Plans I and IV.

The table also makes it appear, from the proportions between trailers handled and revenues collected, that Plan II may be most profitable; Plan I least profitable. This doesn't necessarily follow, because, under Plan II, railroads perform a complete shipper-to-consignee service, including terminal pick-up and delivery, have the highest costs, and necessarily charge accordingly. Under Plan I, they perform only line-haul service, and receive for that only part of whatever charges the shipper pays to the cooperating trucker.

With that background, here at the close of 1960, what does the future hold?

Nearly everyone agrees, certainly, that piggyback will continue to grow. Predictions have ranged all the way from "about 10% of gross freight revenues," to "complete replacement of all box-car traffic." As of now, the first, and more conservative prediction, looks more likely. The second appears increasingly to be well above any mark likely to be achieved within the foreseeable future.

Most railroad men, to be sure, do anticipate further growth—but they look for it to be at a relatively slower pace. That apparently slower pace may be attributable in part to the purely mathematical fact, already mentioned, that each year's advance will have to be calculated against a progressively larger base.

It may also be due, however, to the fact that much of the easy-to-get TOFC business has already been won. Further gains will be, according to one TOFC salesman, "like pulling teeth."

Any spectacular near-future spurts in piggyback traffic seem likely to come from one (or a combination) of the following factors:

1) A marked upswing in general business, and, thus, in total traffic moving.

2) Attraction of substantial piggyback traffic by major railroads which have only recently gotten into the operation, notably, of course, the Coast Line and the Southern.

3) A "breakthrough" into piggyback movement of commodities not presently handled in heavy volume. Most likely candidates for such a breakthrough, as of now, appear to be chemicals and/or petroleum products in tank-trailers; and packing house products in refrigerated trailers. There are no insurmountable physical obstacles to the handling of any of those items; much of the necessary groundwork has already been laid. All the items are high on the "target list" of many railroads. And a sudden swing to piggyback by any one of them could easily provide the same sort of "shot in the arm" growth impetus given by the prairie-fire spread of new-auto TOFC last year and this—though there is some feeling that piggybacking of meat would drain off about as much traffic from freight cars as from trucks.

Another factor which could conceivably affect future growth (perhaps adversely so far as number of trailers is concerned) is a reflection of the first question listed at the beginning of this article: How much is piggyback tonnage actually contributing to net revnue?

Most railroad men seem to feel that the service, over-all, is a paying proposition, but there are some spotty doubts. One railroad, for example, said of a specific operation: "Volume is good, but expenses are high, so we're not really making very much net." Another railroad's piggyback operating chief expressed to Railway Age the opinion that his company might make 10 to 20% more money with 10 to 20% less TOFC traffic—provided, of course, it could select the business to be sloughed off. "There's no merit," another man said, "in handling bodies —unless they ring the cash register."

The doubts, as yet, aren't necessarily widespread, but they are beginning to show up—and they may result in some searching looks at piggyback charges and at the type of traffic being solicited.

### *What About III, IV?*

No one, as yet, seems to be greatly concerned over the possible effect of Examiner G. A. Dahan's report—adverse to Plans III and IV—in ICC Docket 32533 (RA, Aug. 22, p. 9). That reflects the fact that the Commission has still to pass on the examiner's proposals. It's also partly because the adverse Dahan report is somewhat balanced by a favorable report from Examiner L. B. Dunn in another Plan III case, ICC Docket 33021 (RA, July 25, p. 14). But the lack of concern seems to stem mostly from the fact that nearly everyone apparently expects the case to go from the Commission to the courts, and possibly right up to the Supreme Court.

"The railroads," one man put it, "have too much at stake to accept as final an adverse ruling from any lesser tribunal. I suspect the truckers feel the same way. That means any final decision is probably five to 10 years away. In that time, a lot of things can happen."

So, though the Dahan report is a cloud on the horizon, nobody's running for the storm cellars. Railroads are continuing to offer Plans III and IV—and, what's more, expecting Plan III, as already stated, to outstrip the others in comparative growth.

That leaves unanswered what may be the biggest question of all: Are wheeled trailers, or wheel-less containers, the piggyback vehicles of the fu-

(*Continued on page 31*)

PLAN VI piggyback—LCL in 20-ft trailers, loaded in delivery-route order—made headway on several roads, including the UP and the GN.

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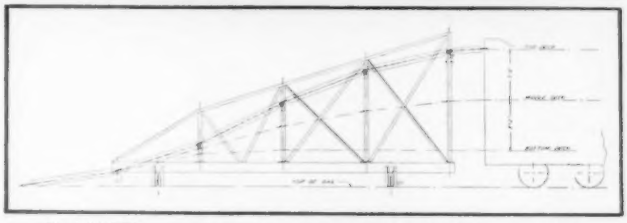
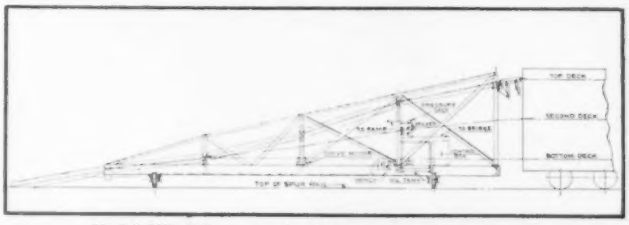
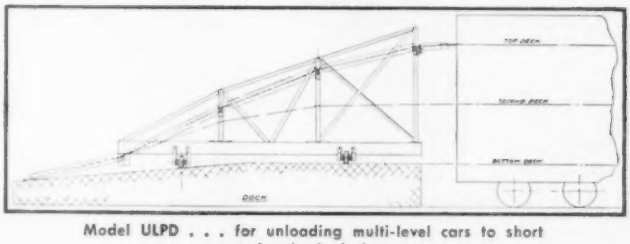


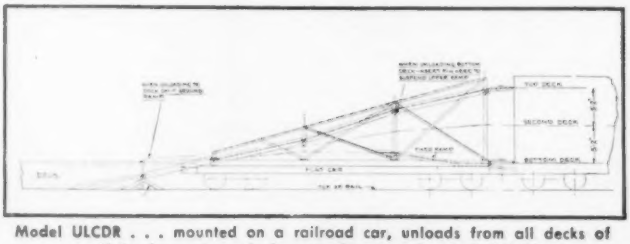
Model ULCR . . . sits on top of the rail and unloads from all decks from multi-level cars.



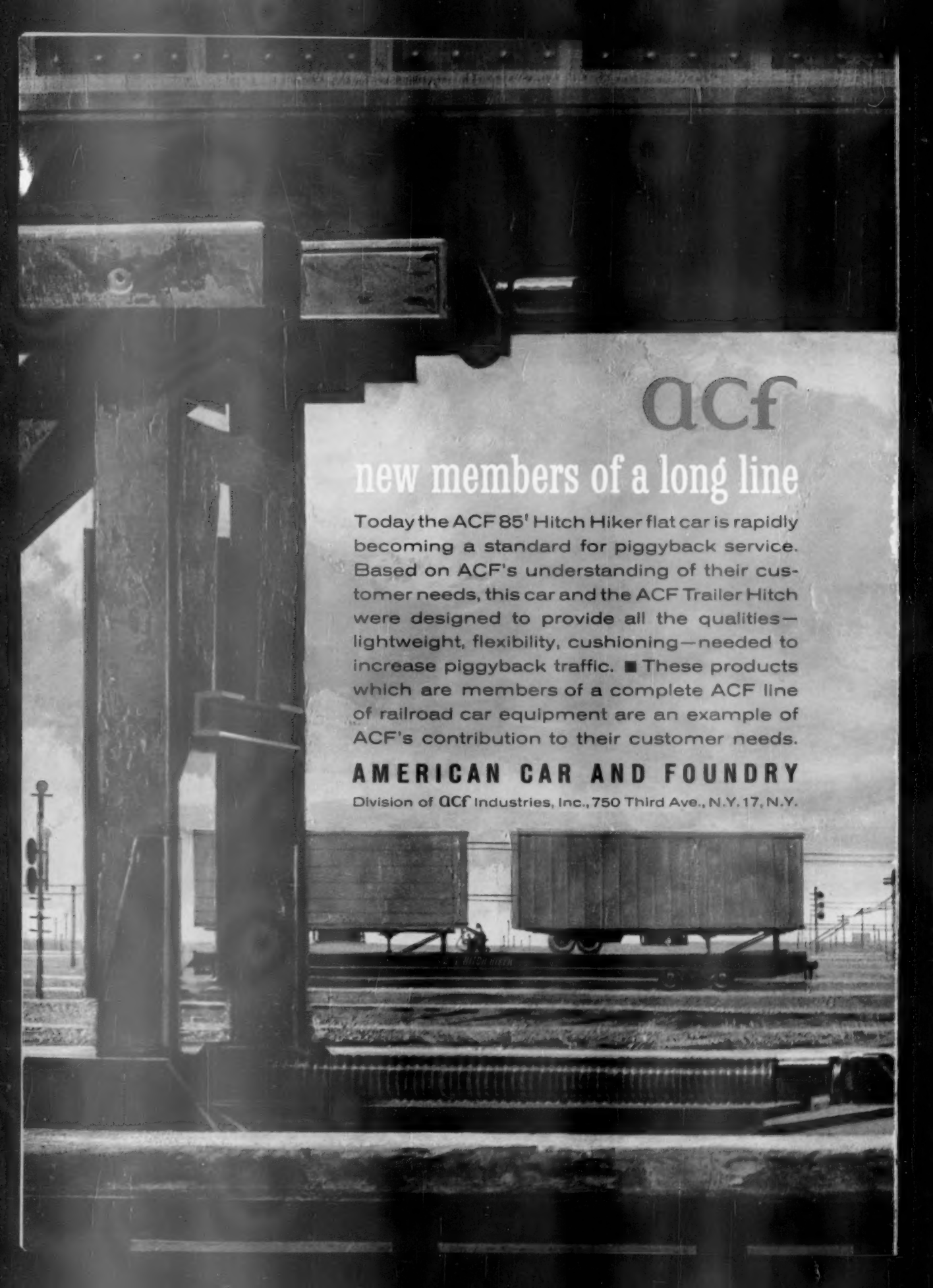
Model LUL C-R . . . unloads from the multi-level cars to the rail.



Model ULPD . . . for unloading multi-level cars to short piggyback docks



Model ULCDR . . . mounted on a railroad car, unloads from all decks of multi-level cars to a dock or to the ground at rail heights.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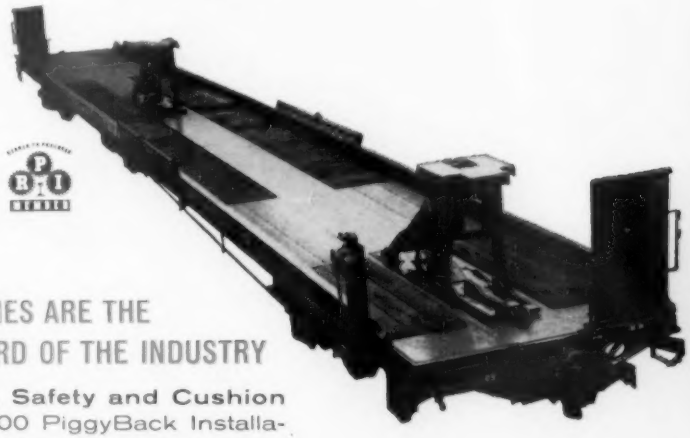

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**R. T. (BOB) EATMAN** worked 12 years in Transportation department of S. P. at El Paso before coming to KCS Lines as commercial agent there in 1940. Three years military transport, attaining captaincy. Awarded 4 battle stars. Two daughters, 7 grandchildren.

## TOFC TRAFFIC, REVENUES REACH NEW HIGHS (*Continued from page 26*)

ture? Are railroads right in sticking largely to conventional TOFC, or should they be more active in the container field?

As in most big questions, there are arguments on both sides.

The wheeled trailer is readily available in generally adequate numbers (except for occasional spot shortages). It is standardized. It can go anywhere, by highway behind any standard tractor; by rail on any piggyback flat car. For TOFC handling it requires no great investment by railroads; so long as cars and loading systems are compatible, they don't need to be fully standardized. But in rail service it does require hauling wheels, which means extra weight and height which sometimes bring clearance problems. And the trailer isn't too good for overseas shipments, where wheels take up too much valuable vessel cubage.

### *Are Containers Coming?*

Containers, without wheels, avoid those problems. But most big containers now available require special chassis for highway hauling; special cars and transfer devices for rail hauling. Those cars and devices cost money—and, perhaps more important, require a high degree of compatibility if not of absolute standardization.

Up to now, steamship lines have been the leaders in containerization. Railroads have tended to let someone else carry the ball—with two important exceptions. One exception is the New York Central's Flexi-Van system, which has been extended to some other railroads and to some overseas shipping lines. The other is the Missouri Pacific-Texas & Pacific "demountable body" container system, which was extended this year to the Baltimore & Ohio.

There are indications, however, that "containerization" may be catching on the railroads. The roads already own nearly 700 containers, and plan to buy at least 200 more. Another year could conceivably witness some pretty definite steps toward rail containerization.

One straw in the wind is that the Southern's new "piggyback" system apparently leans more toward handling of containers than of trailers (RA, Oct. 10, p. 45). Another is the substantial number of side transfer devices—self-propelled cranes—installed by railroads in the past 12 months. (These can side-lift trailers between car and ground—but they can also transfer containers.) A third is the increasing availability of equipment suited to either trailer or container movement—General American's G-85 flat car; cradle-equipped TTX cars, etc. A fourth is the sheer amount of work being done by highway and rail equipment manufacturers on the development of standard, compatible containers and transfer devices. And a fifth might be described as the feeling, already noticeable among some shippers, that containers just have too many advantages to be indefinitely ignored.

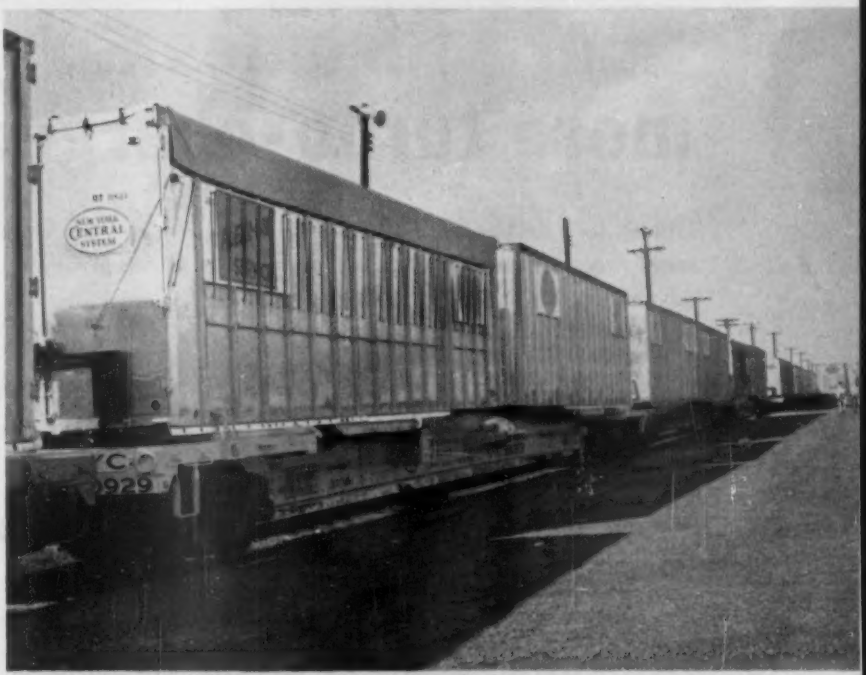
These advantages, some people think, could help the railroads in the rate field, by permitting them to establish tariffs based on equipment which would combine the carrying capacity of a box car with the flexibility of a truck. Others think containers have operating advantages. As an example, F. S. Macomber, a Chicago management consultant, declared a few weeks go that a train of 40 container cars would save 500 tons in tare weight over a comparable train of trailer-carrying cars—partly from use of lighter cars; partly from elimination of trailer wheels.

Arguments are legion on both sides. For the foreseeable future, at least, the probable result will be a compromise, with straight piggybacking continuing, but with containers becoming more and more important. To quote J. W. Scott, vice president—traffic, of the Kansas City Southern: "It is not felt that containerization will replace piggybacking, but rather that the two will operate side by side."

Before even that result can be achieved on any large scale, however, there's one question, as sticky as any technical problem, that has to be answered: Who's going to own the containers?

Of railroads answering Railway Age's piggyback questionnaire, only 11 say rail carriers will own the container units; six predict ownership will be lodged in car pools, like those of private car lines, and 20 in pools or private shippers. But out of 54 leading industrial traffic managers answering an earlier Railway Age survey (RA, July 25, p. 19) only three thought containers should be owned by shippers. Only eight would have pooling or leasing agencies get into the act, and 43 thought the ownership burden should rest on the carriers.

In view of these opposite attitudes, it seems obvious that there must be some practical compromise on the ownership question before containers can make much progress—regardless of how much technical development there may be in the field.




**FLEXI-VAN**—the NYC's own version of piggyback—grew at about same pace as its wheeled trailer counterpart. Some see it as "containerization."

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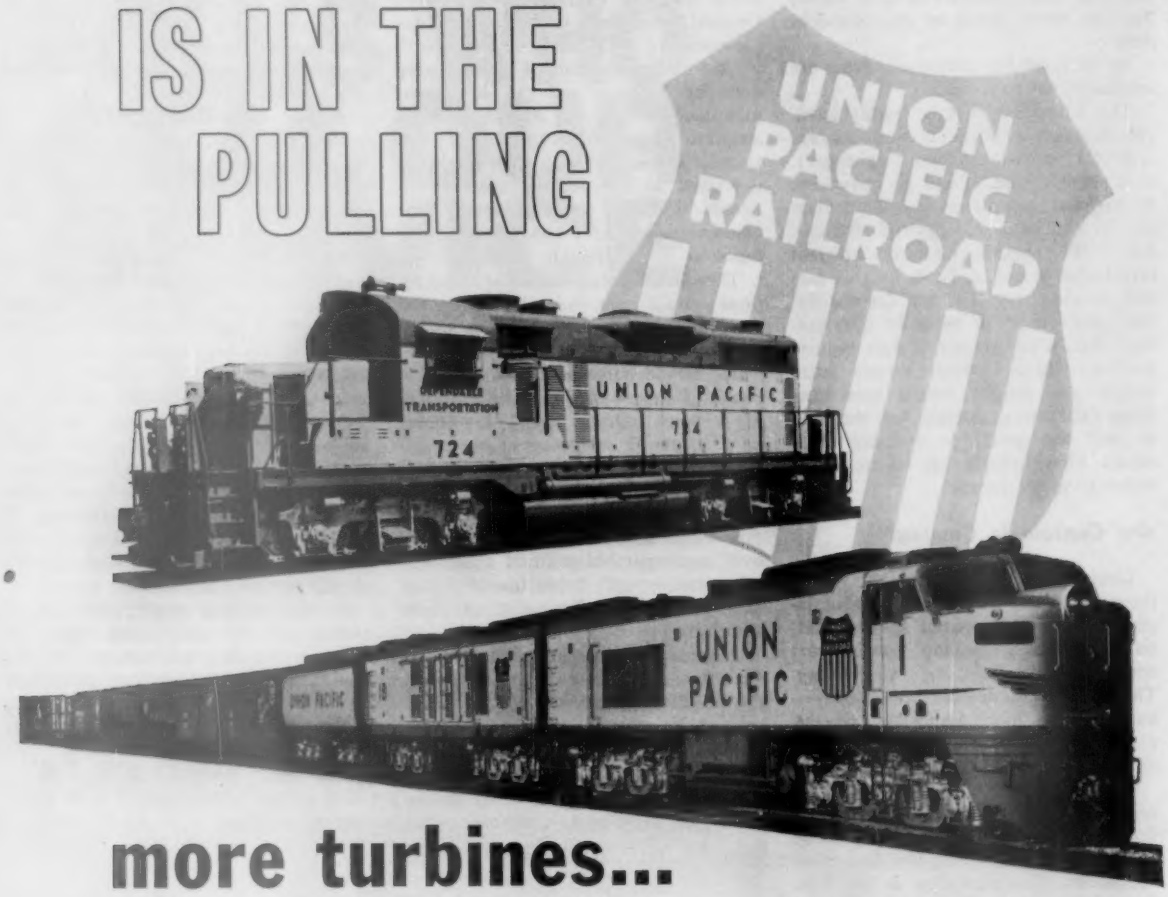


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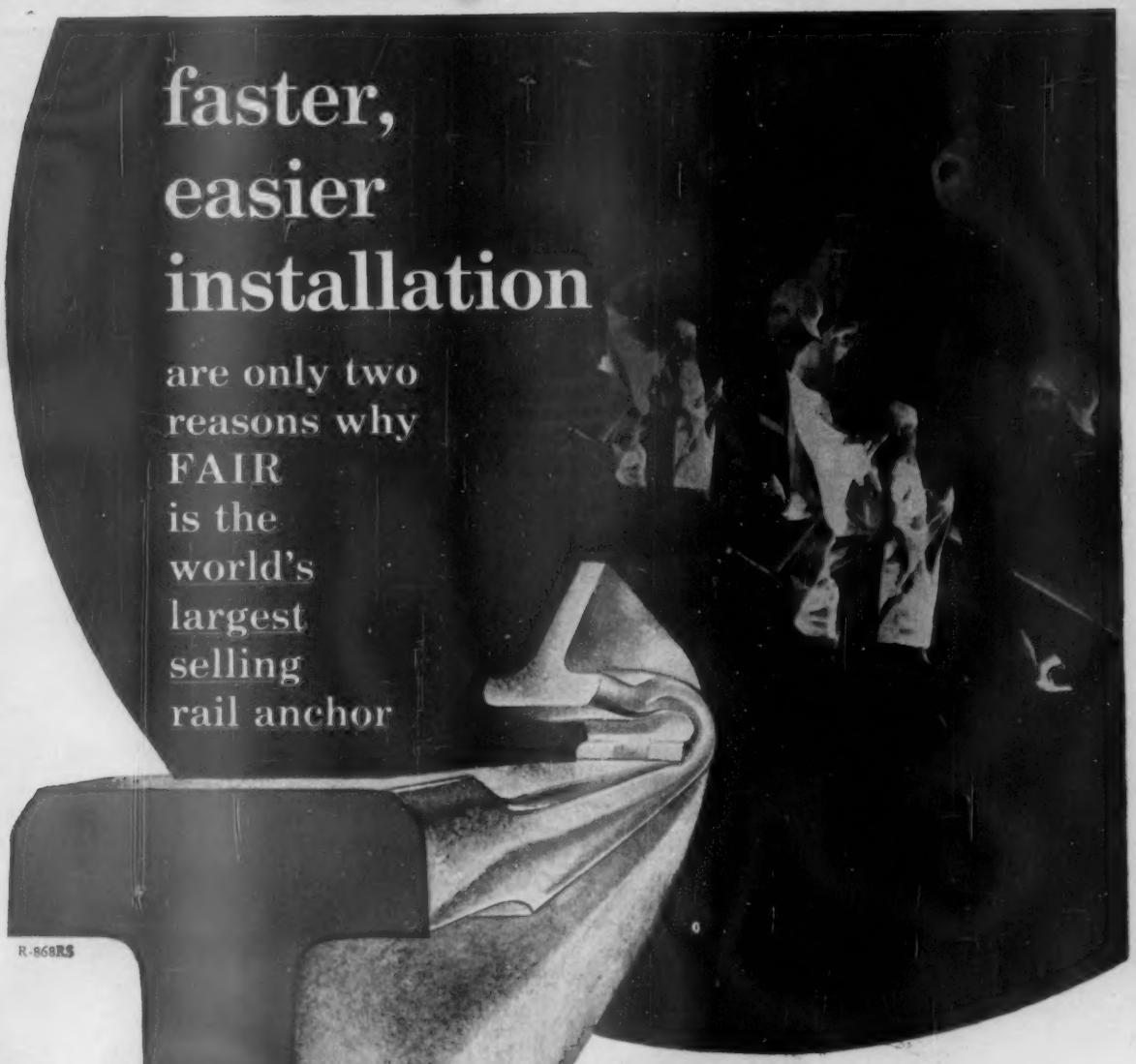

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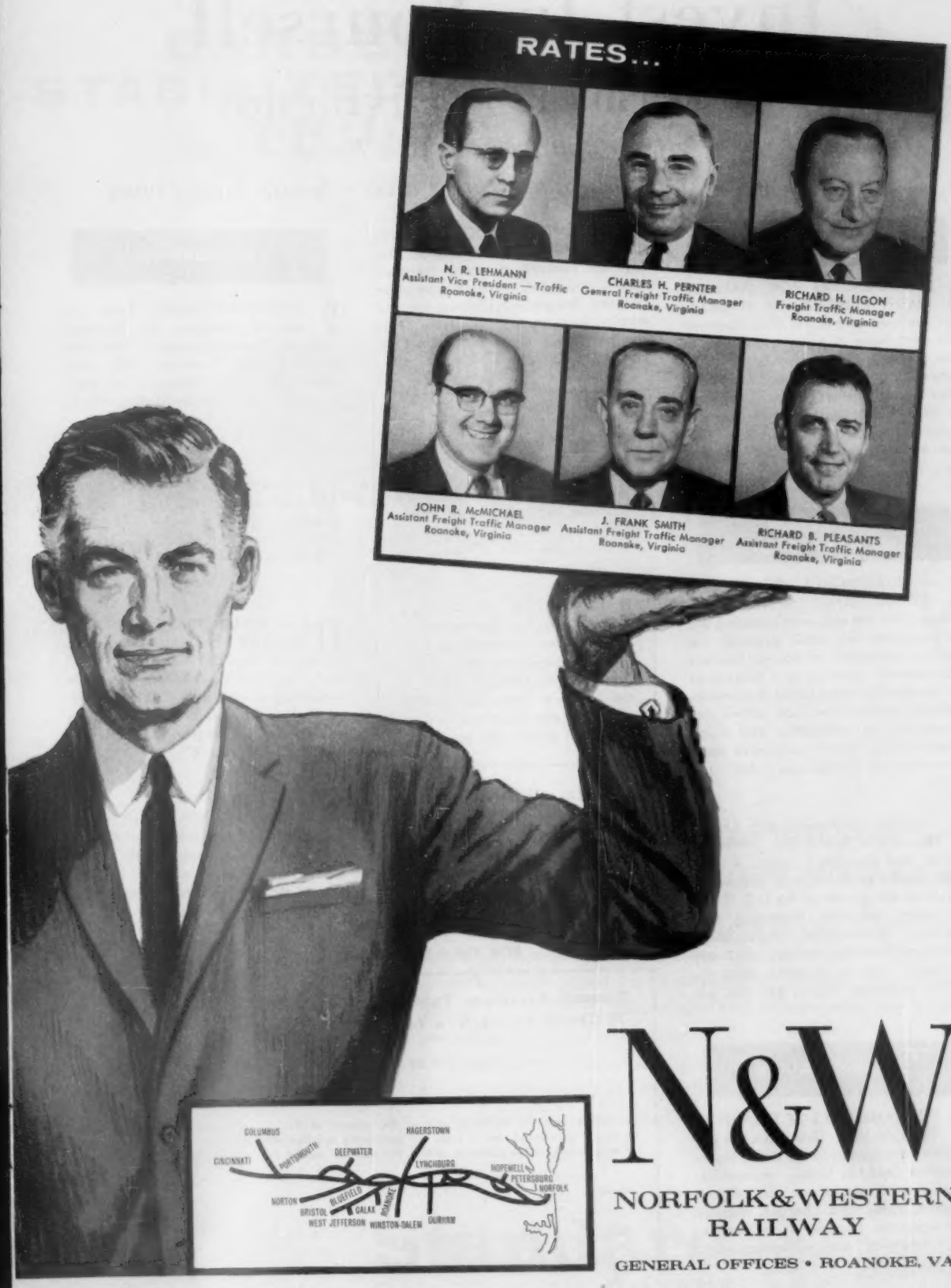


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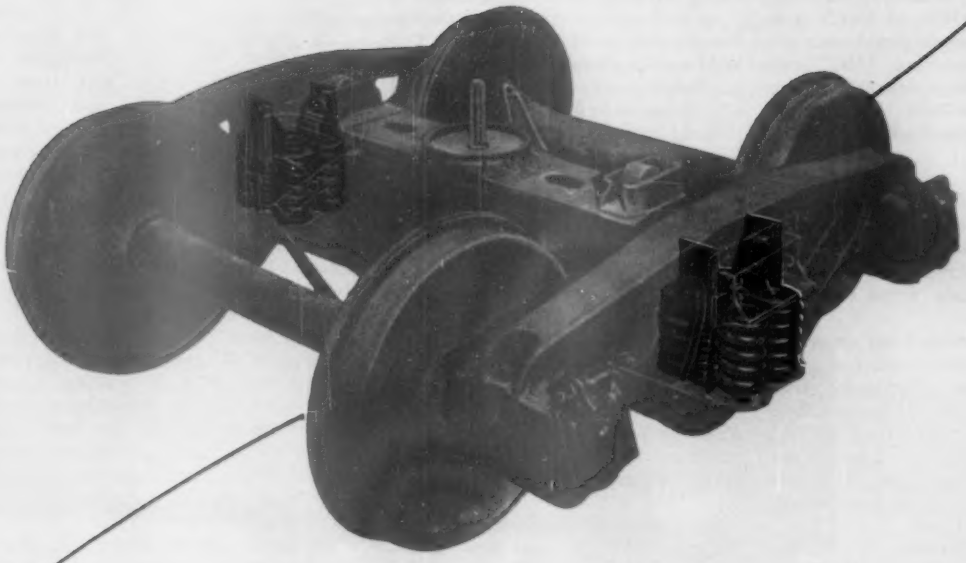

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# Why GSC Turns to Piggyback

► **The Story at a Glance: Think of a company such as General Steel Castings and you think of a pretty consistent shipping pattern—heavy, bulky products going out via gondola, standard or special flat car. It's a generally accurate, but incomplete, picture—because General Steel is turning increasingly to piggyback loads to keep its shipments on the rails.**

**Today, Traffic Manager Roy H. Kranz has about 10% of GSC's outbound traffic moving in piggyback service. He's confident that TOFC can solve many of his company's future shipping problems—and that General Steel's use of piggyback will show steady increases.**

In maintaining its long-standing "ship by rail" policy, General Steel Castings often has found that piggyback is the answer to meeting rates and deliveries offered by competing forms of transportation.

Thus far, the company has set up six TOFC routings—and more are coming. GSC products go piggyback from Granite City, Ill., to East Chicago, Ind.; Philadelphia, Pa.; Schenectady, N.Y.; and Evansville, Ind.; and from Avonmore, Pa., to Chicago and St. Louis. Coming up later: routings from Avonmore to the West Coast.

It's been four years since Roy Kranz, who has handled traffic at GSC for the past 20 years, first turned to piggyback—and the experience has been most satisfactory, to the extent that Mr. Kranz sees the possibility for lifting General Steel shipments considerably above the 10%-TOFC now being registered.

GSC isn't shipping under "plan" piggyback. It's a straight-rate proposition, with no differential in rate on straight carload shipments vs. piggyback moves. But GSC and its customers in some instances benefit from a weight basis—carload minima are 40,000 lb, TOFC are usually 20,000.

And a major advantage of the piggyback operation has been in the time saved on delivery. Shipments of castings for army tanks to East Chicago, for example, invariably get first-morning delivery. Shipments via Flexi-Van service, New York Central from East St. Louis to Schenectady, have been arriving regularly the second morning. It's a type of service that produces wires like this one to Mr. Kranz from T. A. Wildman, expediter for Alco Products at Schenectady: "Flexi-Van, P.L.E. 413, delivered to us 8 a.m., as scheduled [Second morning out of St. Louis]. Everyone happy. Thanks for your cooperation."

Piggyback, however, isn't without its problems—principal among them the matter of load size. Railroad passenger car castings with integral end sills and body bolsters, for example, exceed [highway] lateral maximum-size standards when loaded on flat-bed truck trailers. Special permission must be obtained from municipalities and, in many cases, from states in order to move such shipments over the road.

### *Police Escort Needed*

With loads of these castings going out via TOFC, General Steel had to obtain municipal permission—and a police escort—to get the shipment from its Granite City plant to Madison, Ill., for loading onto piggyback flat cars. The excess width of the shipment: six to eight inches. The distance involved: just one mile. Still, Mr. Kranz points out, that's much simpler than securing special permission from a host of municipalities and states, as would be required if GSC were forced, in order to meet delivery requirements, to ship all-highway.

With service the main factor and rates equal (or in some cases better) by piggyback, GSC has one major field left to conquer in its efforts to develop more efficient shipping operations: the determination of the most acceptable, efficient and safe loading patterns for shipments of castings.

### *Success Based on Cooperation*

So far, this type of loading has been handled satisfactorily by the Granite City plant's carpenters and shipping department. With the cooperation of railroad representatives, they draw on the AAR Freight Loss and Damage Prevention Section for help and ideas in blocking and bulkheading extremely heavy shipments. Currently, the only product class exempt from loading-pattern experiments is GSC's castings for army tanks, which are loaded on flat-bed trailers and chained down. No blocking is necessary, except for balance blocks at one end.

With most other TOFC shipments, however, GSC puts as many as three carpenters to work on blocking. A load of railway car or locomotive truck frames (two six-wheel or four-wheel units), for example, gets secure blocking with heavy oak timbers, staybolts and heavy timber shims holding the units firm.

Actually, almost every piggyback trailer load has presented a new problem—but solutions are being found and each succeeding shipment has been an improvement over the one before. There are problems involving blocking, shoring, load placement, scientific calculation of balance of large castings—and all lend themselves to a continuous flow of new ideas, new systems, new patterns.

Cooperation has been the key to success. Mr. Kranz doesn't have direct authority to supervise loading crews, but traffic department and crews maintain a close working relationship. And as shipping problems are solved and new patterns developed, benefits spill over into other GSC departments. The swing to piggyback and its service advantages, for example, has given the sales department a new weapon. Railroad performance on TOFC shipments has been excellent—so sales, without hesitation, can promise fast, on-time delivery of any product lending itself to piggyback movement.

(In 20 years with General Steel and 20 years before that in the traffic department of Nesco Company, Mr.

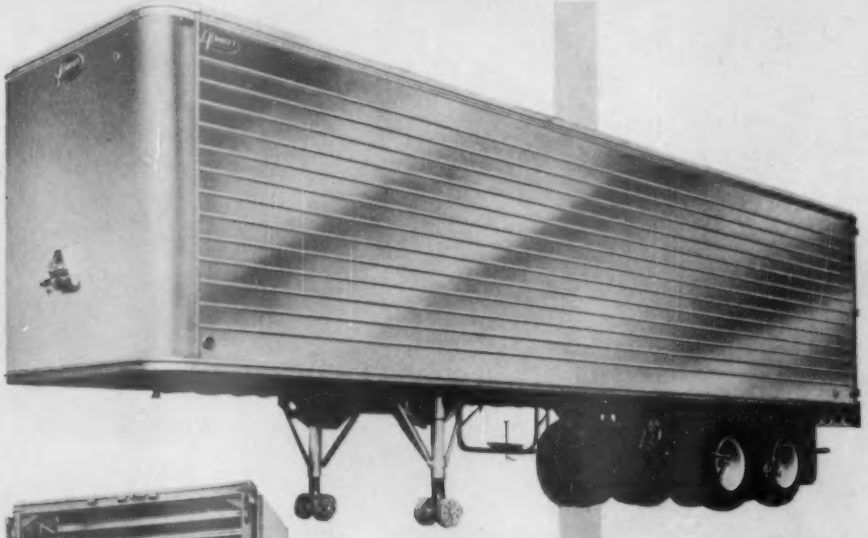
*(Continued on page 46)*

**Roy H. Kranz is a 40-year veteran in industrial traffic—20 years as traffic manager with Nesco Company and 20 years with General Steel Castings. In his two decades at GSC, he's seen it turn from a rail-oriented industry to a well diversified company, still with a big stake in the railroad business—a stake bolstered earlier this year with General Steel's purchase of St. Louis Car Company. He's active in local traffic organizations, as a member and former director of the St. Louis Traffic Club and a member of Delta Nu Alpha transportation fraternity, St. Louis chapter.**

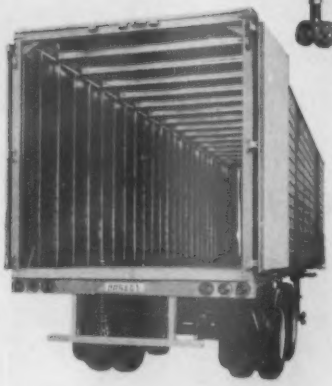
# WHY DORSEY DESIGN MEANS BETTER PIGGYBACK SERVICE

Millions of ton-miles of faithful service under the most strenuous conditions establish two Dorsey models as ideal answers to the primary requirements for profitable piggyback trailer operation—ruggedness, payload capacity and economy.

The operating records of hundreds of present owners prove that dependability is beyond question with either the Dorsey Champion or the lower-priced Dorsey Atlas. This means a tremendous saving in time and money to executives approaching the problem of specifying piggyback equipment: the basic design work has already been accomplished and only details remain. And Dorsey Special Products Division engineers are at your service for this purpose.

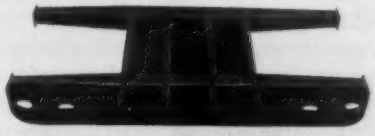


CHAMPION—Stressed skin and tubular steel X-bracing are combined in this exclusive Dorsey design to make this popular model the industry's toughest lightweight medium-priced trailer. Aluminum sheets and structural components are optional.



ATLAS—Drivmatic machine riveting adapted by Dorsey from the aircraft industry is the secret of the unusual strength of the Atlas' true monocoque structure. Drivmatic-riveted joints are 40% stronger than ordinary riveting.

*This rugged upper fifth wheel* is just one of the many design features that make Dorsey Trailers noted for outstanding dependability. The pickup plate spans the width of the trailer and turns up 4" at the outer edge to form a structural reinforcement.



Let our engineers help you "tailor your trailers" to meet any piggyback requirements.

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**DORSEY TRAILERS**
**ELBA, ALABAMA**
A Subsidiary of The Dorsey Corporation

# S.P.'S FREEWAY FOR FREIGHT

Every day, an average of 725 freight trains roll over Southern Pacific's 14,900-mile rail network. They haul a daily average of nearly 300,000 tons of freight for people and industry.

To keep these shipments moving smoothly, at all times and in all weather, S. P. maintains hundreds of freight terminals (56 with piggyback ramps); five transloading centers; a fleet of more than 80,000 rail cars; more than 2,000 diesel locomotives; and an advanced system of communications that includes the country's largest private direct-dial telephone network.

Southern Pacific's freeway for freight serves more communities *direct* in the West and Southwest than any other transportation system. For your next shipment, why not call S. P. first?

**Southern Pacific**

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TRAINS • TRUCKS • PIGGYBACK • PIPELINES

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## SAVE TIME
## SAVE LABOR

WIX POROSITE Diesel Lubricating Oil Filters have proved themselves where proof is conclusive . . . on the job. The principle of filtering Diesel lubricating oil through paper faced many who said it couldn't be done. *But* WIX *did it!* WIX, who has pioneered so many advances in Diesel Oil Filtration, now offers a development that SAVES A BIGGER DOLLAR WITH A BETTER PRODUCT. Yes, WIX answers high maintenance costs with Filters that Save Oil, Save Time and Save Money.

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# GANGWAY!

## Here comes a turnpike train!

NO DOUBT you think those new multibillion dollar superhighways now being planned and built (and paid for with your tax dollars, and ours) are for you. And you're right. But be ready to share them with a new development in the trucking industry that promises to make today's "big rig" look like a sports car by comparison.

It's called the "turnpike train" — and it is well named! Right now, 34-wheel, two-trailer truck trains more than 90 feet in length and hauling well over 100,000 pounds of freight are rolling on some of America's busy, crowded highways. (Chances are, *your* car is not over 19 feet long and weighs less than 4,000 pounds.)

Big? You bet! But not big enough, evidently. Plans on the drawing board call for units that will dwarf today's models. The prediction has been made that giant "road locomotives" of the future may haul as many as ten trailers behind them.

Is it any wonder that the cost of constructing and maintaining roads subjected to such heavy loads keeps spiraling . . . that the hazards of highway travel today have made "pleasure driving" almost a thing of the past? Think about it, the next time a highballing highway freight train suddenly looms up in your rearview mirror (and be sure you give it plenty of room to get by).

Harry A. DeButts
PRESIDENT

THE SOUTHERN SR SERVES THE SOUTH

**SOUTHERN RAILWAY SYSTEM**

WASHINGTON, D.C.

# 13,662 sq. ft. of plate GLASS shipped FRISCO PIGGYBACK

**66 jumbo glass panes weighing 1,384 lbs. each shipped St. Louis to Texas *without damage***

Recent FRISCO Piggyback shipments contained a fragile, brittle commodity. Plate Glass panes—½ inch thin, 9 feet wide and 23 feet high—were the largest ever made by a nationally known glass manufacturer.

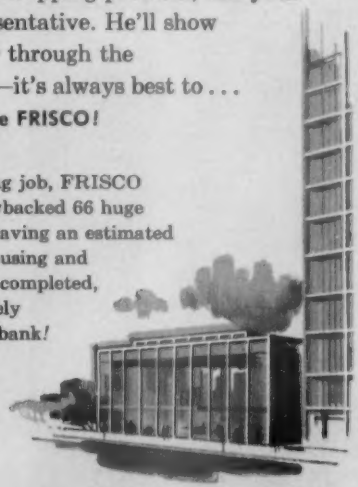
Shipper carefully crated plates and entrusted their loaded trailers to FRISCO Piggyback. The glass arrived at destination in perfect condition.

Whenever you have a shipping problem, call your FRISCO Sales Representative. He'll show you why—to, from or through the Southeast-Southwest—it's always best to . . .

***Ship It Piggy-Back* on the FRISCO!**

FRISCO

For this Texas-size glazing job, FRISCO and its connections Piggybacked 66 huge panes direct to job site, saving an estimated $5,000 unloading, warehousing and reloading charges. When completed, there will be approximately 4½ *acres* of glass in this bank!



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# PIGGYBACKS GO TO MARKET FASTER WITH THE HELP OF WIDE-LITES

A big advantage of piggyback freight service is speed — and that means the piggyback trailers can't wait for daylight to be unloaded. So to turn night into day at its Dallas piggyback facility, the Texas and Pacific Railway has installed 35 Wide-Lites.

Twenty-four 400-watt Wide-Lites are mounted on concrete bases along the unloading area. These lights, with their wide, uniform light pattern, give even lighting that speeds unloading work, and prevents shadows that are safety hazards. The T&P has added extra utility to the floodlight supports by installing a receptacle in each support to supply current for electric-powered wrenches used in unloading operations.

Nine pole-mounted 1000-watt Wide-Lites give bright, even lighting on the truck parking area of the Texas and Pacific's piggyback installation.

Each Wide-Lite with color-corrected mercury vapor lamp will do the work of two or more incandescent floodlights, reducing the number of poles, cross-arms and fixtures required. And maintenance is reduced because the Wide-Lite has a rugged cast aluminum body, with epoxy paint for corrosion control . . . tempered glass lens . . . exclusive segmented polished aluminum reflector . . . patented lamp mounting that grips the lamp at both ends and virtually eliminates lamp breakage from shock.

*Find out all the benefits Wide-Lites give you — send coupon today!*

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## WHY GSC TURNS TO PIGGYBACK (*Continued from page 38*)

PIGGYBACK MOVEMENT of products like General Steel's takes some advance planning. In conference are (left to right) W. E. Miller, traffic representative, NKP; W. Ashley Gray Jr., vice president—railroad sales, GSC; Mr. Kranz; and D. W. O'Leary, general agent, NKP.

### GSC: TOFC Helps Keep Freight on the Rails

Until 15 to 20 years ago, General Steel's business was about 90% railroad-oriented. Since that time, the company has diversified to the extent that today only about 40% of its operations are in railway supply. In addition to car building, it's gone into such products as power-shovel components, steam turbine shells, wear-resistant castings for the crushing and mining industries, hull and turret castings for army tanks, and cast iron and steel rolls for the metal rolling industry.

In its transportation patterns, though, GSC holds to its policy of shipping by rail whenever possible. As TOFC methods develop, the company is finding it can often arrange rail shipments where customers otherwise might demand the rates and delivery offered by trucking. At present about 90% of shipments from Granite City and Eddystone go by rail. At Avonmore, the company's recently acquired roll-producing division, trucks still pick up much of the business, but piggyback, newly introduced at the Avonmore plant, is swinging more and more tonnage to the rails. All products shipped to railroads and railroad supply companies go by rail.

Rail rate codes under which GSC ships are Lists 1 and 2 of the tariff covering Iron and Steel Manufactured Articles in Eastern Territory—List 1 covering railway car products, List 2 covering all other cast steel items produced.

Kranz has had his share of the problems traffic managers usually face. But at GSC, there are at least two areas where the complications aren't quite so critical: General Steel's outbound rail shipments fall under just one rate, covering railway car products and all other cast steel products; and, barring a serious derailment or highway accident, the company's products just aren't susceptible to in-transit loss and damage.)

#### *Avonmore Business Should Grow*

Thus far, General Steel's two other plants—at Avonmore, Pa., and Eddystone, Pa.—haven't figured significantly in TOFC's growth, but business is expected to show gains out of Avonmore. Eddystone's shipments aren't well suited to piggyback movement due to their unique shapes and dimensions. Similarly, shipments of rail and transit cars from GSC's newly acquired subsidiary, St. Louis Car Company, do not lend themselves to TOFC loading and usually are shipped on standard flat cars.

Outbound shipments at the Avonmore plant are made up of iron and steel rolls consigned to steel mills, and piggyback rates were instituted only last June 1. GSC hopes TOFC will eliminate some of the traffic handled by trucks, and the headaches involved in shipping out of Avonmore, which is somewhat isolated off the principal shipping lanes in the mountain area northeast of Pittsburgh. When rates to the West Coast are introduced, Mr. Kranz looks for a perceptible increase in piggyback traffic out of the Pennsylvania plant.

#### *Piggyback Proves Its Value*

And it seems a safe prediction that, as General Steel develops new product lines, piggyback will get a long, hard look when this form of shipping will be of benefit to the railroads and GSC's other customers. Mr. Kranz' four years of TOFC experience have convinced him of the value of the service, even for GSC's out-of-the-ordinary type of product.

He's also generous in praise of railroad men for their cooperation in setting up TOFC patterns and plans, along with their aid in adopting rates, loading methods and safety measures. And he's depending on this continuing cooperation as a major factor in enabling GSC to solve loading problems and obtain more economical and flexible rate structures—which, in turn, will lead to greater use of piggyback by General Steel in its efforts to keep its shipments on the rails.

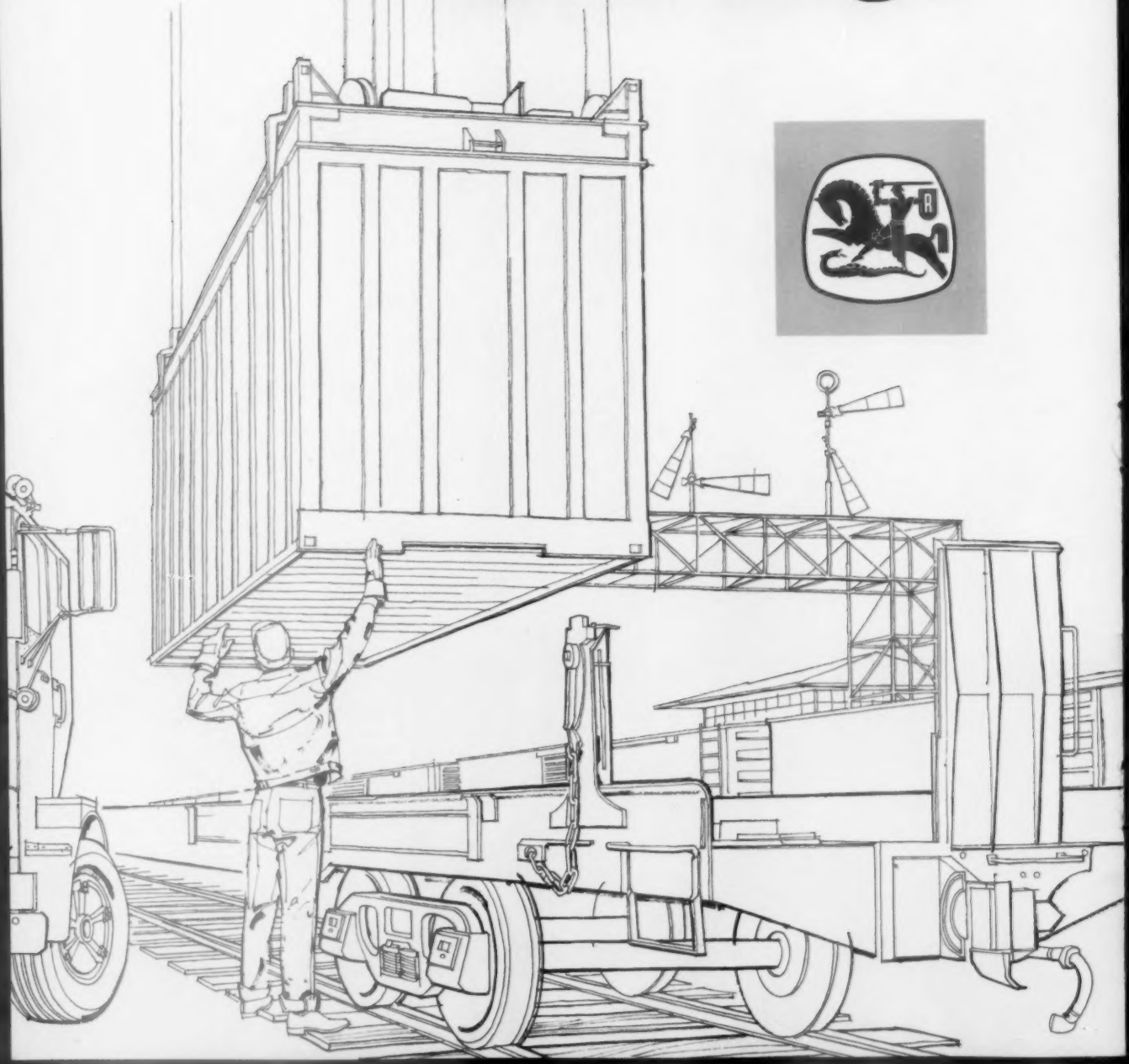
# SPECIAL FREIGHT EQUIPMENT

## MADE WITH REYNOLDS ALUMINUM

**Lightweight, Easy to Handle, Strong**

Rugged, Lightweight Reynolds Aluminum

# cuts work, adds payload capacity, serves longer



One good way to cut freight shipping costs is to cut the cost of *handling* that freight. And, as more and more shippers and rail operators are discovering, strong, lightweight Reynolds Aluminum is one material that can effect important savings in handling.

Used in containers and special freight equipment, aluminum—because it's strong, rustfree, and corrosion-resistant—can prevent damage, soiling and pilferage of cargo. These same qualities also mean that equipment made with aluminum serves longer with less maintenance, stays bright and clean with less work.

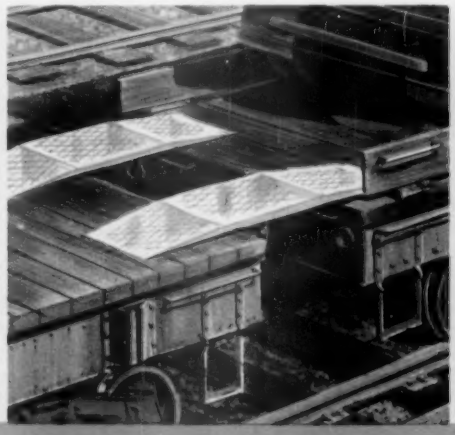
Reynolds Aluminum alloys developed for railroad equipment weigh as little as *one-third as much as steel*, so handling is easier, faster, more efficient. And not only is loading labor reduced, but payloads can be increased when the containers, crossmembers and bridge plates weigh less.

When you're specifying or buying special freight equipment, consider *all* the costs: maintenance, service life, handling, and non-paying weight. And consider protection of freight, and service to shippers. If you do, you'll want equipment made with rugged, lightweight Reynolds Aluminum.

**Crossmembers** made with Reynolds Aluminum are "one-man" crossmembers, weighing approximately one-half as much as the standard wood and steel types. Aluminum crossmembers are easier to handle, and they serve longer, won't rust or splinter—and never need painting. Freight is better-protected with crossmembers of Reynolds Aluminum because they're at least 10% stronger—and rust-free, to prevent stains.

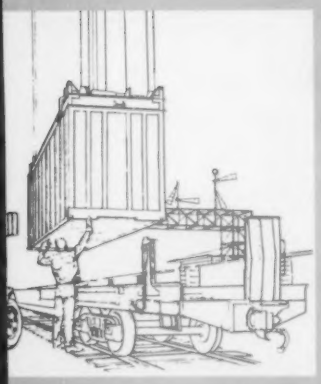
**Bridge plates,** used to speed handling of piggyback containers on flat cars, combine high strength with low weight when made of Reynolds Aluminum plate or tread plate. Designed to carry 16,000 lbs. axle load, these manually-operated aluminum bridge plates weigh 139 lbs., compared to 300 lbs. for equivalent steel plates. They never need painting, never rust. In addition, aluminum retains a high scrap value after its long service life.

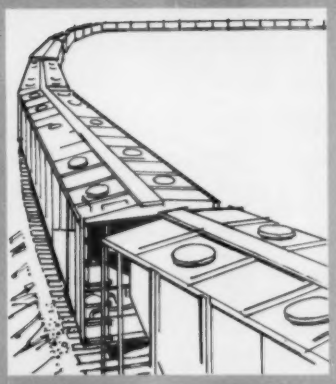
**Containers,** whether trailer van size or fork-lift truck size, are made for fast, efficient handling if they are made with Reynolds Aluminum. Stronger than steel, pound for pound, aluminum takes the roughest handling to protect freight from damage. Yet, it's light in weight, reducing the work, time, and power needed for loading—and adding payload capacity. Aluminum containers won't rust; they keep cargo clean without protective coatings.



**Write for details on railroad equipment made with Reynolds Aluminum . . . see next page**

# Aluminum Designed for Railroad Use
## ...Reynolds Aluminum





There are many different kinds of aluminum. Knowing which alloy to use—in which form—for any specific railroad application is something that comes only with experience. That's why so many leading railroads, shippers, and equipment manufacturers turn to Reynolds Aluminum.

Reynolds has teamed with leading railroad equipment manufacturers and users to develop aluminum products that are designed to lengthen service, improve performance and cut costs of a wide range of railroad equipment.

Reynolds Aluminum is at work right now in hopper and gondola cars; box car doors, roofs and innerliners; refrigerator car doors, flooring and floor racks; in railyard equipment such as building products, crossbuck and operating signs, and electrical conductor.

For details, or experienced technical help in the design, fabrication, or use of any railroad equipment made with aluminum, contact your local Reynolds office, or write *Reynolds Metals Company, P.O. Box 2346-TM, Richmond 18, Virginia.*

# REYNOLDS ALUMINUM

Watch Reynolds new TV Show "Harrigan & Son", Fridays; also "All Star Golf", Saturdays—ABC-TV.

MEMBER

## SHIPPERS SUPPORT 'ONE-PLAN' TOFC (*Continued from page 17*)

might fail to make proper allowance for use of shipper-provided equipment or service, and possibly destroy piggyback's value to common carrier truckers.

Objections raised by those who oppose the one-plan idea fall generally into three groups: it would be difficult to establish and administer, it would reduce flexibility, and it might "choke off" piggyback's future growth.

Spokesmen for the first group were men like H. T. Reed, director of transportation, Line Material Industries, Milwaukee, and R. J. Garrison, traffic manager, A. B. Dick Co., Chicago. Mr. Reed says frankly his company "doesn't understand how one plan incorporating the present variety of services is possible." Mr. Garrison thinks it is "necessary to have more than one plan, because all transportation characteristics are not equal."

The second objection—lack of flexibility—was mentioned particularly by C. T. Coy, traffic manager, Eli Lilly & Co., Indianapolis; I. L. O'Brien, GTM, Monsanto Chemical Co., St. Louis, and K. C. Batchelder, traffic manager, West Coast Lumbermen's Association, Portland, Ore. One TOFC plan, says Mr. Coy, "would not give the railroads sufficient flexibility to compete in all circumstances"; "it would not be as flexible and would not meet conditions met under present arrangements," Mr. O'Brien agrees.

Mr. Batchelder, writing in more detail, says "piggyback has possibilities that are most favorable to the carriers. There are so many different interests that, if you tried to work them all into one plan, you might defeat the practical application that is now so successfully being carried on."

The West Coast was also the source of objections to a single plan as a possible deterrent to piggyback's future growth. From Portland, W. C. Cole, GTM, Georgia-Pacific Corp., wrote that "a one-plan approach directly contradicts the current competitive rate-making policies of the ICC. Piggyback is too undeveloped to restrict by 'plans,' 'systems,' and controls. After its full potential is realized, then is the time for restricting measures from the various piggyback interests. At present we are up to Plan V, and do not know yet how many more there may be . . ."

J. J. Sheehan, traffic manager of C. C. Moore & Co., at San Francisco, feels much the same way. "The principle of piggyback is the same for the various users. One plan could not apply to this comparatively new and changing method of transportation, and it must not be choked with one plan. The future may bring several additions or new plans that will be more revolutionary."

## How Do We Get One-Plan TOFC?

"Your questions must be answered in the affirmative. However, Question (1) is something like asking the United Nations whether they would consider it desirable to work out a single comprehensive disarmament plan. I am certain they would think it desirable.

"As to Question (2), I am also certain that, if such a plan could be developed on terms fair to everyone, most of the delegates would prefer such a single plan to the present variety of plans. Again, however, like the disarmament mess at the U.N., we doubt exceedingly that one comprehensive, satisfactory piggyback plan can be achieved.

"As the plans currently exist:

"a) Shippers are comparatively happy with Plan III, but a bit skeptical of Plan IV. Satisfaction with III is slightly clouded by the commodity restriction. Skepticism with IV stems from the fact that it is, for all intents and purposes, solely a freight forwarders' plan, and the forwarders to date have shown no inclination to return any part of their cost savings to shippers in the form of rate reductions. We doubt that they have any intention of so doing. Shippers for the most part advance no serious objections to continuance of Plan I, provided they are allowed to partake of similar benefits under Plan III.

"b) Freight forwarders are comparatively happy with Plan IV, but rather unhappy with III, in that the latter plan gives decided impetus to the spread of shippers' cooperatives. For years they have attempted to legislate shippers' cooperatives out of business, and it is quite probable they wince every time they think of the freight currently being handled by cooperatives under Plan III. They would like to see Plan III abolished, or a very modified plan substituted for that currently in operation.

"c) Common motor carriers, like Khrushchev, oppose everything unless it carries a decided advantage for them. They look upon all freight as theirs by some sort of divine right, and as a result are against private carriage, Plans II, III, IV, and V, and any plans yet undreamed of which might in any way create competition. The only plan they favor is I, which oddly enough, entitles them to use rail facilities for the line-haul on an operating basis almost identical with that accorded shippers under Plan III, but at lower charges.

"d) Railroads apparently feel they can derive real benefits from Plans I, II, III and IV, but from what we have read do not see eye to eye as regards Plan V.

"Under the circumstances, it is practically impossible to see how one workable, comprehensive, fair plan can be devised. Somebody's going to have to give, and if, as is customary, it turns out to be the shipper, you may be assured that another tremendous segment of tonnage currently carried in common carriage will move over to private carriage. . . .

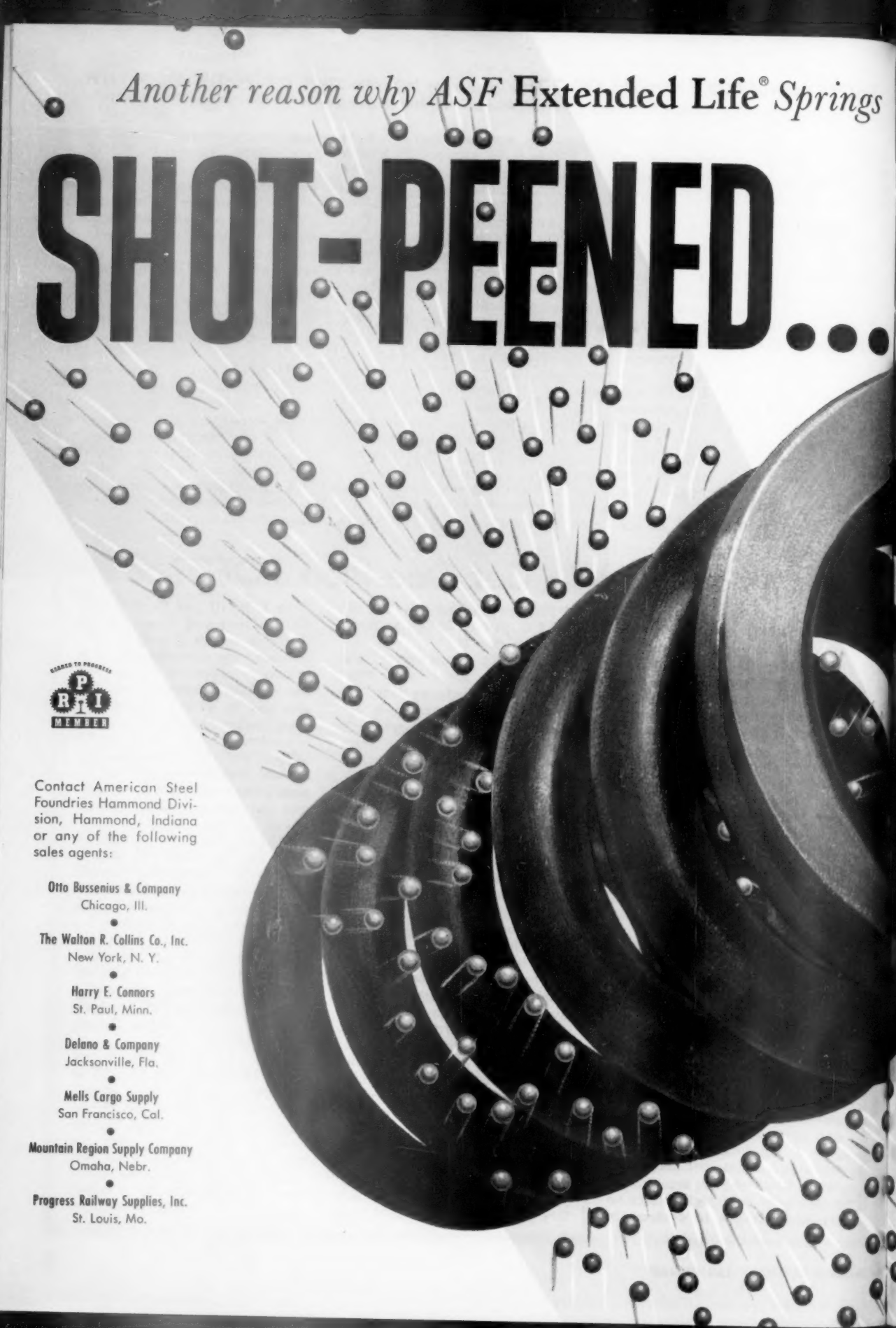
"There seems to be no possibility of bringing about a meeting of minds as regards the various plans. Further, the separate plans offer specific advantages which each shipper must evaluate. . . .

"As we view it, the single plan would become one big commodity rate which may very well have the effect of eliminating the benefits of all the plans and taking us back to where we were before the advent of Plan III. . . .

"What we would like to see would be extension of Plan III to the West Coast. We would be perfectly willing to have Plan IV extended to the East Coast. The extensions would really open the door to competition, and some good might thereby be achieved."—*David M. Daly, director of traffic, Bristol-Myers Products Division.*

*Another reason why ASF* **Extended Life®** *Springs*

# SHOT-PEENED...



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*give you longer service at lower costs . . .*

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ASF *Extended Life* Springs are subjected to a high-velocity bombardment of steel shot . . . every square inch of the surface is finely peened.

Result? Shot-peening improves the surface microstructure; makes it tougher and more resistant to fatigue.

Add to that an improved method of heat-treatment and closer control of production, and you get a spring with superior resistance to permanent set that will outlast any ordinary spring, at least twice as long as any double heat treated spring. How much longer depends entirely on your operating conditions. Specify ASF *Extended Life* Springs . . . at no increase in price over ordinary springs . . . and find out for yourself!

You get a higher return on your spring investment . . . with

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**AMERICAN STEEL FOUNDRIES**

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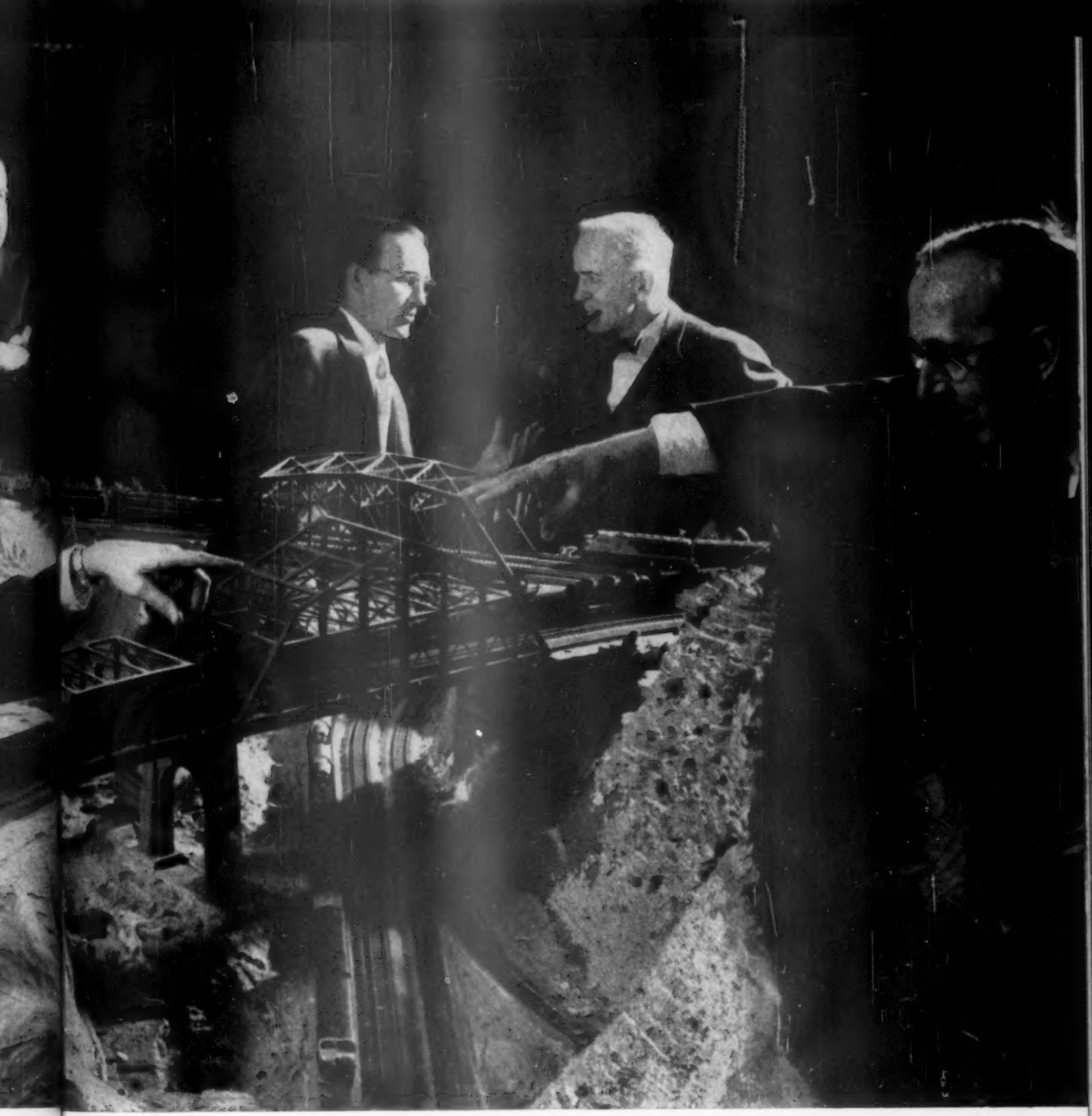
There is! With Centralized Traffic Control, they could operate their model railroad in a confident, competitive, easy way . . . from one central location.

And you, too, can operate your railroad in a modern, competitive way with UNION CTC, because it gives the dispatcher full control over every train movement. He knows the location of every single train . . . can start it, stop it, switch it from one track to another to best meet operating conditions, and speed traffic flow.

CTC also frees manpower—allows the railroad to move men to more important positions. CTC makes more money for you. You get more efficient use from existing tracks and equipment. Trains move faster—customers grow friendlier. Roads with CTC have reported a 30 to 40% annual return on their investment in CTC.

Invest in the future. The completely automatic train



# to run a railroad"

is *now possible* and *practical and the expansion of CTC lays the ground work for automatic control*. Union Traffic Control Centers fit any control system and can be applied to all types of interlockings. You won't have to replace Union CTC to accommodate future developments. With Union CTC, you've already taken a step into the future of railroading. You can take that important step *now*.

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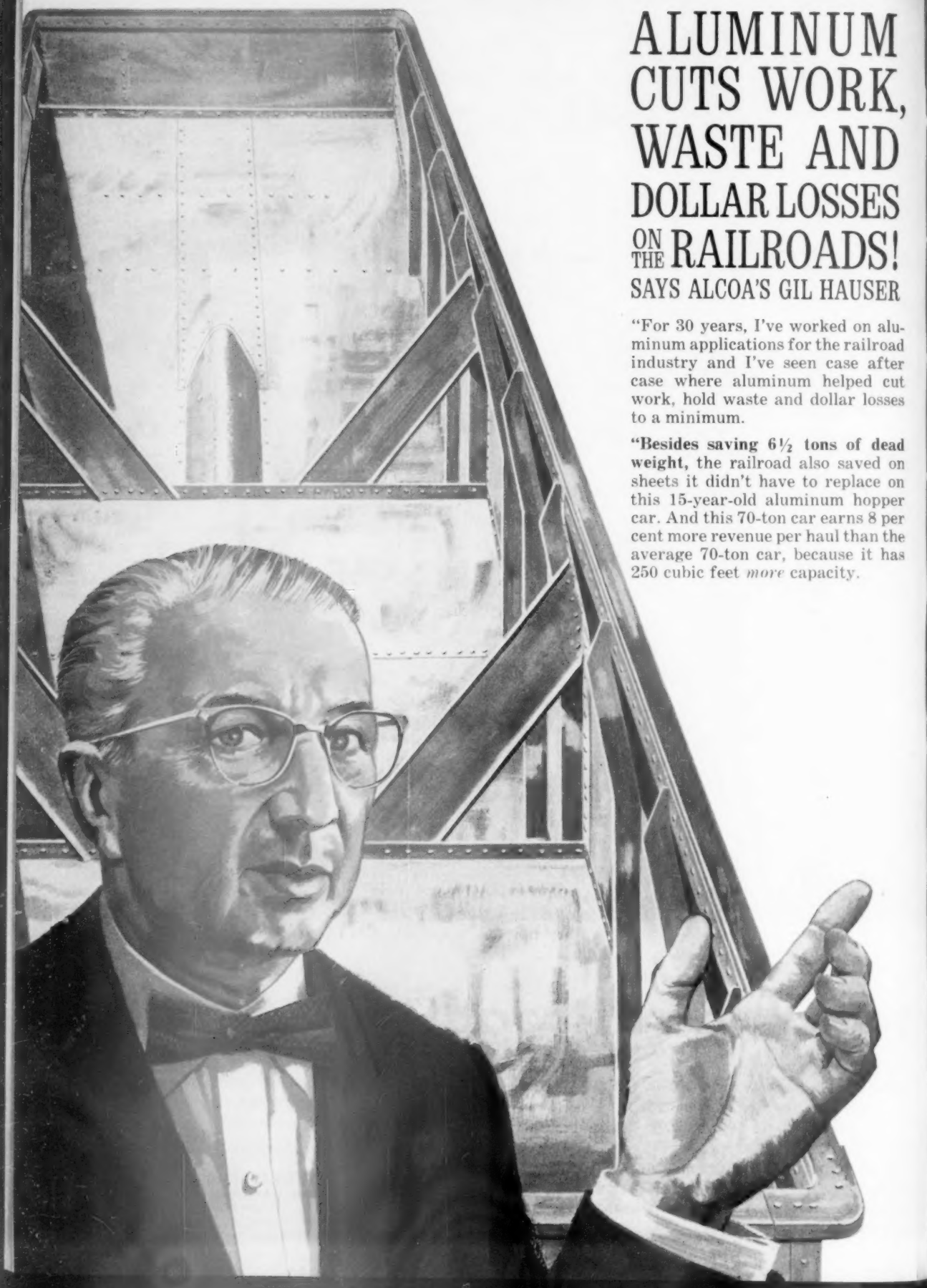


# ALUMINUM CUTS WORK, WASTE AND DOLLAR LOSSES ON THE RAILROADS!

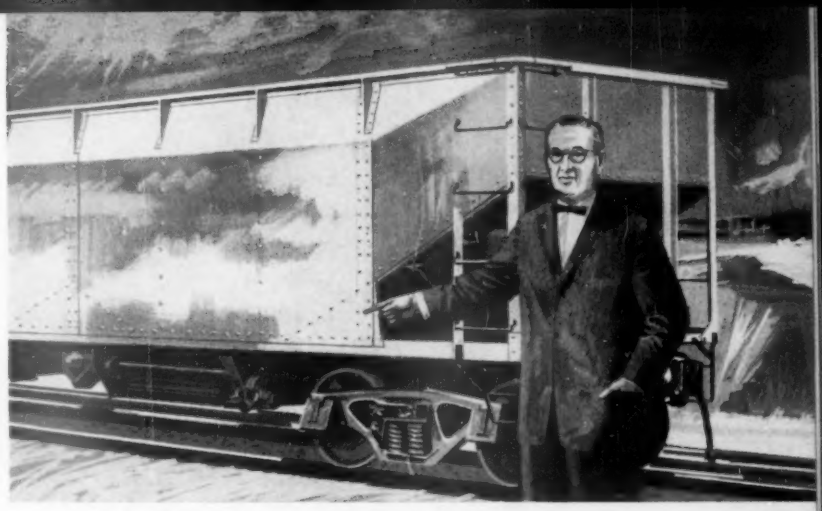
## SAYS ALCOA'S GIL HAUSER

"For 30 years, I've worked on aluminum applications for the railroad industry and I've seen case after case where aluminum helped cut work, hold waste and dollar losses to a minimum.

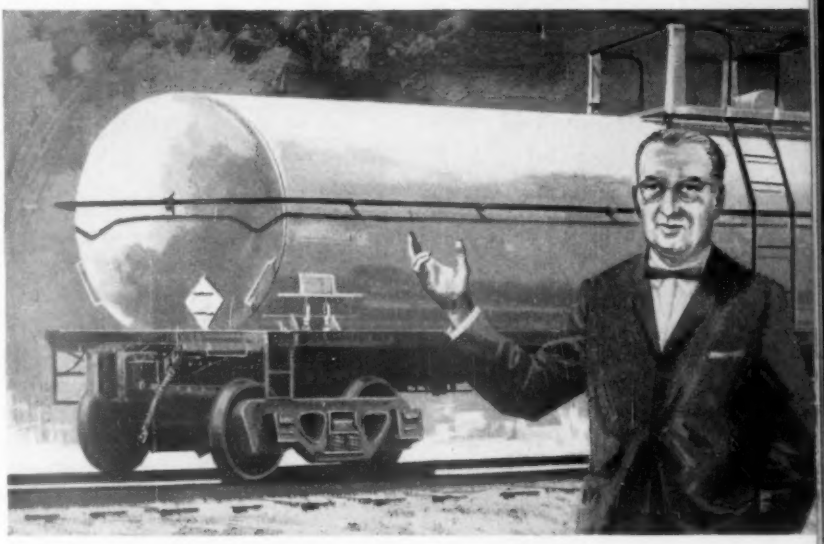
**"Besides saving 6½ tons of dead weight,** the railroad also saved on sheets it didn't have to replace on this 15-year-old aluminum hopper car. And this 70-ton car earns 8 per cent more revenue per haul than the average 70-ton car, because it has 250 cubic feet *more* capacity.

**"Even highly corrosive sulfur can't hurt aluminum,** nor can the worst weather and atmospheric conditions. A big western road is obtaining 200 hopper cars like this . . . cars that can carry almost any kind of commodity. And they'll last for years without the need for *any* repairs due to corrosion.

"Again, Alcoa Aluminum's weight-strength ratio pays off, as it did for these cars, built on 100-ton trucks. Cubic capacity is increased and so is revenue per haul, because the same weight body is *bigger* in aluminum . . . the same capacity body is *lighter* in aluminum!

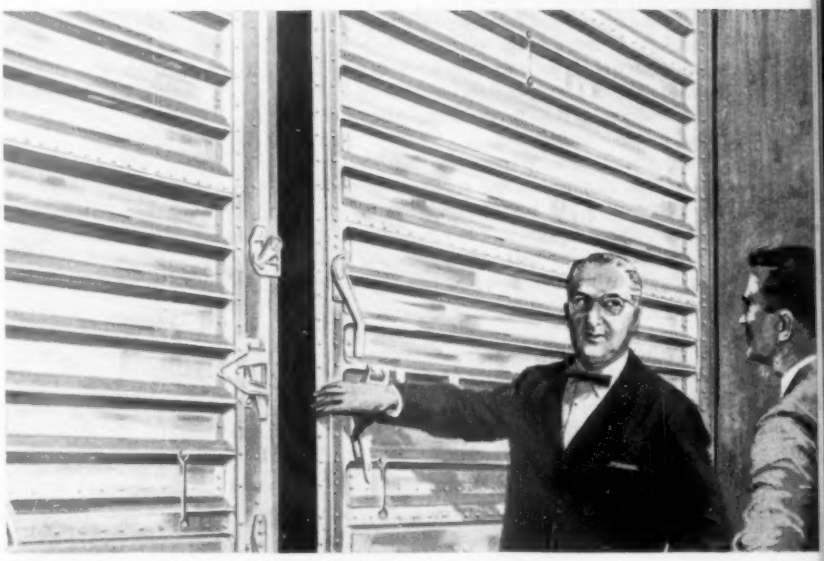


**"New and revolutionary designs in tank cars** — 20,000-gal tank cars without domes—are being built of aluminum. Alcoa has been deep in aluminum tank car design right from the beginning . . . evolving new welding techniques . . . creating new alloys . . . developing fabricating practices.



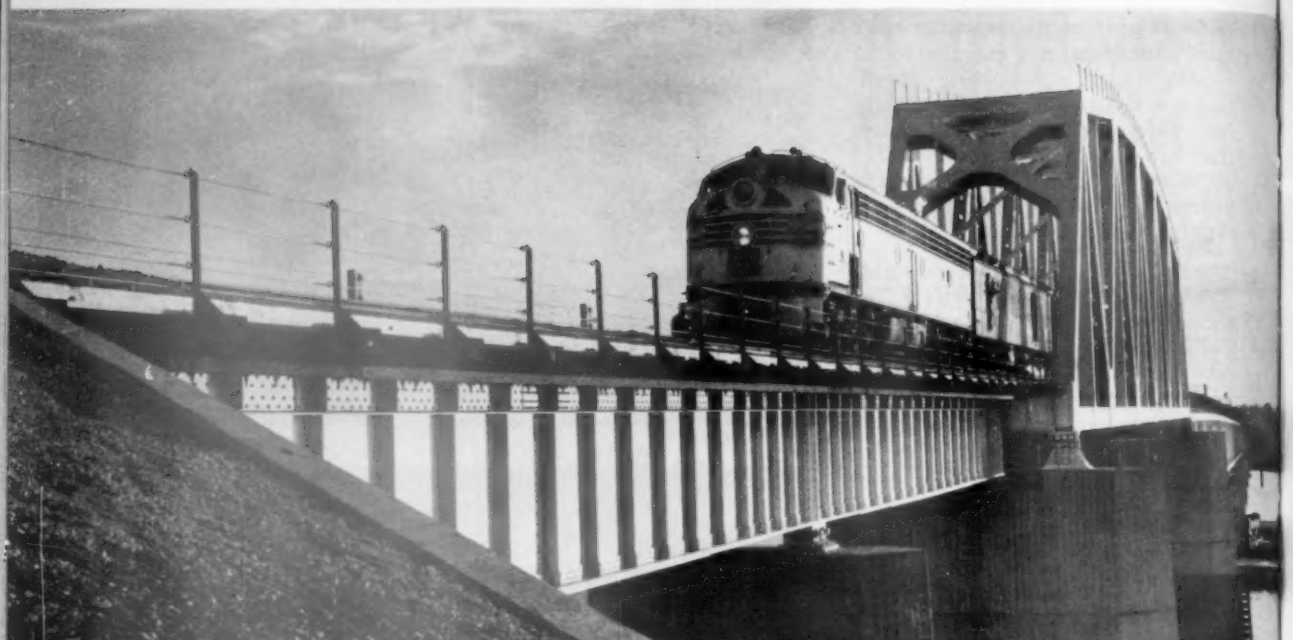
**"Only half the weight of steel doors,** these 10-ft-wide aluminum boxcar doors don't corrode, don't stick—always open and close easily. Alcoa supplied the aluminum and worked closely with the fabricator during production. Unlike heavy steel doors, aluminum doors last as long as the car itself.

**"Compare the initial cost difference . . . then estimate how much less aluminum cars will cost through the years.** Ask the car builder to quote in both aluminum and steel! We don't know everything about putting aluminum to work on the railroads—even after 30 years—but we certainly know more than anyone else in the aluminum field! And any time you want some information, call me collect: Gil Hauser, HIland 1-5826 in Pittsburgh . . . or write: Aluminum Company of America, 1960-L Alcoa Building, Pittsburgh 19, Pa."



**ALCOA ALUMINUM**

ALUMINUM COMPANY OF AMERICA



BURLINGTON'S high-level 2,500-ft bridge across the Mississippi River was dedicated on Nov. 11.

# New Bridge Clears River Traffic

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**The new bridge is part of a $10-million line change on the road's main line to Kansas City, Mo. In addition to the new structure over the river, the project included 70-ft-high embankments and two other bridges, one 716 ft long, the other 296 ft long.**

The Burlington's new 2,500-ft. high-level bridge across the Mississippi River at Quincy, Ill., was officially dedicated on November 11, culminating approximately 1½ years of construction work. The bridge actually was placed in service October 21, when the road's "Kansas City Zephyr" was routed over the new line en route to Chicago.

The new bridge was built as the result of an order from the Army Corps of Engineers to provide a clear channel width of 300 ft and a vertical clearance of 63 ft above normal pool. In addition, the Burlington was notified that the channel would be moved approximately 1,400 ft eastward to the Illinois shore to conform more nearly to the natural flow of the river. Purpose of the relocation was to give river traffic a straight approach to the bridge opening.

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The decision to construct a new bridge was predicated on a number of considerations, including: (1) the fact that the existing bridge was nearing the end of its useful life; (2) the need for improving the railroad's alinement between Quincy and West Quincy, Mo., on the other side of the river; and (3) the troublesome delays to railroad traffic due to the need for opening the bridge frequently to allow river traffic to pass through.

The new river crossing is 500 ft upstream from the previous bridge. It has 14 spans—six deck girders (two 90 ft long and four 84 ft long), seven 228-ft deck trusses and one 336-ft through truss over the navigation channel.

Two other bridges involved in the line change, deck-plate girder spans, are east of the river. One is a 716-ft, 7-span structure across Quincy bay. The other, a 296-ft, 3-span bridge, crosses North Bottom Road and the Burlington's Carthage branch. The bay bridge provides a vertical clearance of 50 ft above normal pool, which is more than sufficient to allow passage of pleasure boats.

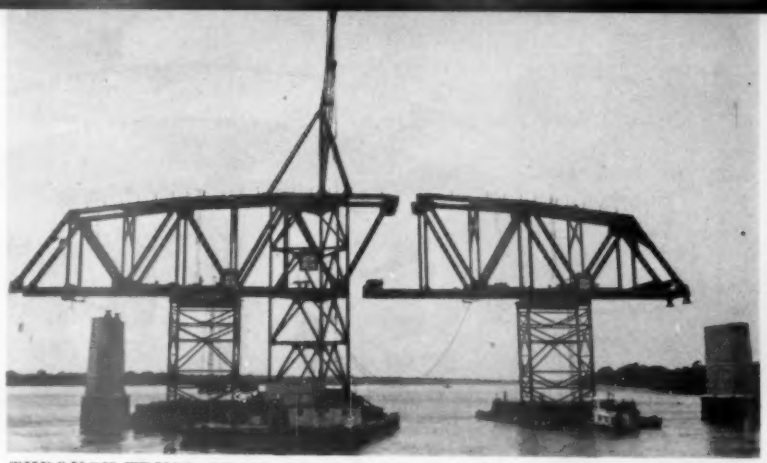
### *Ballast-Deck Structures*

All three structures are ballast-deck bridges designed for Cooper's E-72 loading in accordance with AREA specifications, with slight modifications. To facilitate inspection of the deck-truss spans, walkways and ladders were provided. Track rails on the bridges are fastened with compression clips. The rail used on the line change is the road's standard 129-lb torsion-resisting section.

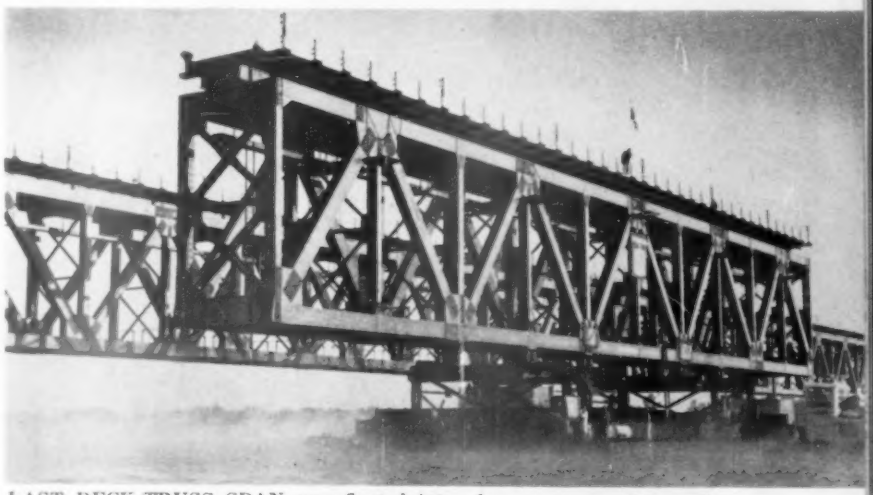
The three bridges are equipped with metal-grating walkways on both sides for the use of trainmen. Motor car setoffs are provided at intervals of 500 ft along the Mississippi River bridge. One setoff, near the center of the bridge, is equipped with a telephone.

Portions of the embankment on the new line are about 70 ft above natural ground. To provide a stable foundation for the embankment approximately 500,000 cu yd of top soil was removed by the LaCross Dredging Corporation, the dredging contractor. About 3.6 million cubic yards of fill were required to construct the embankments. Most of the fill was obtained from material dredged out of

(*Continued on page 64*)

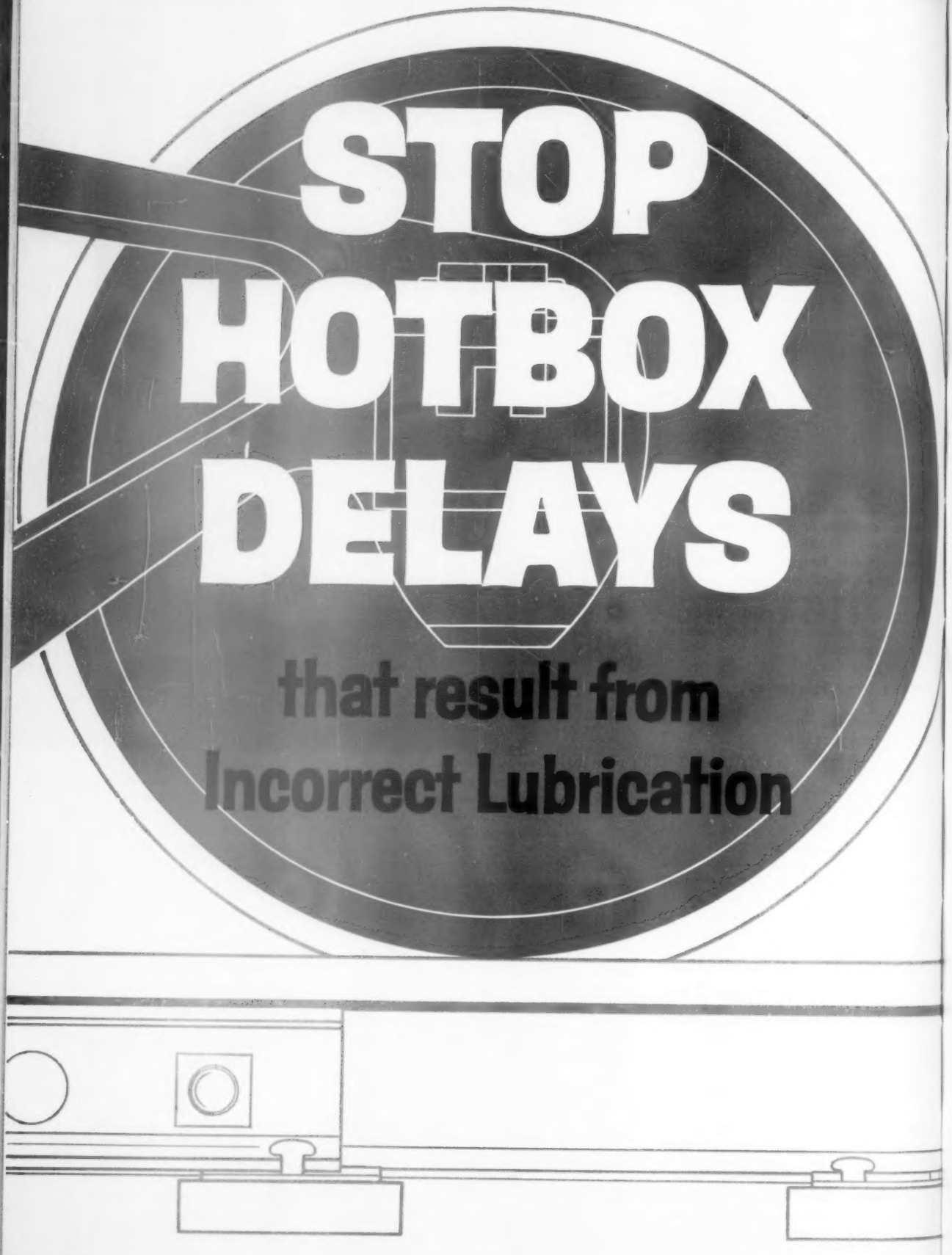


**THROUGH-TRUSS SPAN**, 336 ft long, was assembled in two sections on barges anchored alongside the piers on which it was to be placed. After the two sections were riveted together, barges were flooded to land the span on the piers.



**LAST DECK-TRUSS SPAN** was floated into place as a complete unit, including stringers, timber deck and ties. It was assembled to one side to permit river traffic to use old channel during work.

◀ **HIGH-STRENGTH** bolts were used to assemble final two-thirds of the bridge. To assure proper tension was being applied, about 20% of all the nuts were checked with a torque wrench.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that result from
Incorrect Lubrication

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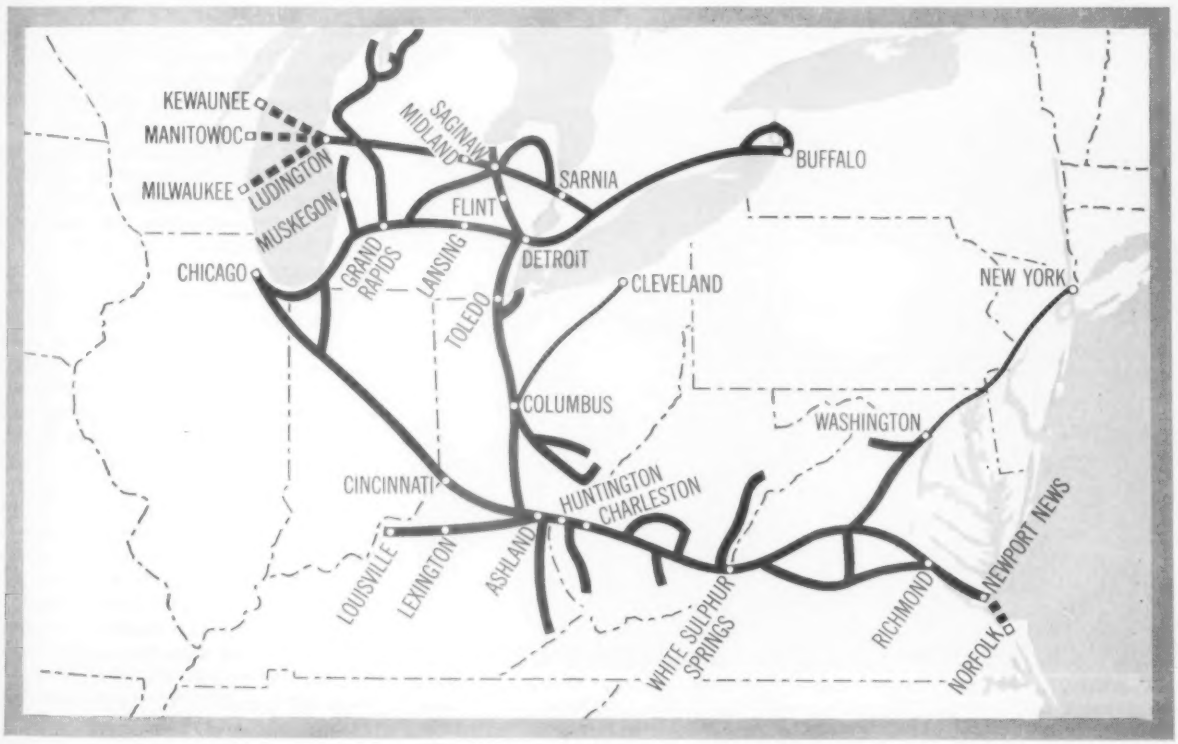

## BRIDGE CLEARS RIVER TRAFFIC (*Continued from page 59*)

the river and from an island between the river and the bay.

The substructures of the three bridges were constructed by the Kansas City Bridge Company, Kansas City, Mo., which also constructed the timber decks on the bridges. The abutments and piers of the river and bay bridges are supported on steel H-piles which extend to bedrock. Some of these piles are 170 ft long. The west abutment of the bridge across North Bottom Road is also supported on steel piling. The east abutment and the piers of this bridge were landed directly on Mississippian limestone.

The contractor for steel erection was the Bethlehem Steel Company. One of its first tasks was the construction of a work harbor and an adjacent work area, including a dock. These facilities were at the east end of the old bridge, between it and the site of the new bridge. An 1,100-ft siding was constructed by the Burlington to serve the facilities.

Actual erection of steel began in April when assembly of the trusses began. Erection of the trusses and of the two shorter bridges progressed concurrently, the latter being completed during last summer. Each of the shorter bridges was erected by a 60-ton derrick car, equipped with a 70-ft boom, operating from the track on the new embankment.

All truss spans were assembled on barges anchored in the river adjacent to the piers on which they were to be placed. The 336-ft through span was the first truss span to be assembled and erected. It was assembled in two sections, each section supported by a falsework tower mounted on two barges. Due to high water, the early stages of assembly work took place in the shelter of the work harbor. When the high water subsided sufficiently, the barges were towed out into the river and anchored between the piers on which the span was to be erected.

When the two halves of the through span were completed they were brought together and connected by rivets while still supported on the barges. Approximately 45,000 gallons of water were pumped into one of the barges to bring it to the proper angle and elevation for joining the trusses. A few days later the span was lowered onto the piers. This was accomplished by flooding the barges enough to lower the span onto timber blocking about three feet high on the top of the piers. Four 250-ton hydraulic jacks, two on each pier, were then used to lower the span onto its bearings atop the piers.

Original plans called for lowering the span directly onto its bearings. Due to the high water the barges could not be lowered sufficiently to make that possible.

With the through span in place the erection crews commenced assembly work on the deck-truss spans. For this work, the falsework towers used to assembly the channel span were dismantled and reconstructed as two low bents on each set of barges. Each set was then anchored alongside the appropriate piers and a deck truss assembled on it. These spans were landed directly onto their bearings on the piers. When one span had been placed the barges would move to the next span, moving around the other set of barges if necessary. After each truss was in place on its piers, stringers were erected and the timber deck constructed. Ballast was then installed and track laid across the span.

The switch to high-strength bolts came after the two east deck-girder spans, the through-truss span and one deck-truss span had been erected. About 140,000 high-strength bolts were required to erect the final two-thirds of the bridge. Nuts for the bolts were run down by air wrenches set to apply the desired tension in the bolts. Some 20% of all the nuts were tested with a torque wrench as a check to assure that proper tension was being applied.

The only exception to the erection procedure outlined above was in the procedure followed in erecting the last deck truss span, which was placed over a portion of the old navigation channel. To keep the channel open for river traffic this closure span was assembled to one side.

To minimize delays to railroad and river traffic, the closure span was installed on its piers as a complete unit, that is, with stringers, timber deck, and ties in place. Rails and ballast were added immediately after the span was landed.

Railroad traffic began using the new bridge the following day. This enabled crews to start removing the portion of the old bridge extending over the new navigation channel. One truss span was removed immediately by reversing the procedure used to install the new trusses. In this operation a barge with its hold partially filled with water was placed under the span. Water was then pumped out until the span, which had been cut away from the remainder of the bridge, was free of its piers. It was then floated to the material dock and cut apart for scrap.

Removal of the span permitted restricted use of the new channel by river traffic. The two adjacent spans were then removed to permit removal of the two piers within the channel. When that work is completed, barges will have unrestricted use of the new channel. The balance of the old bridge, including the remaining piers, will be removed at a later date.

**NEW BRIDGE**, 500 ft upstream from the previous bridge, provides a 300-ft clear channel and a 63-ft clearance above water level, permitting river traffic to pass underneath.

**NEW TRINITY AUTO TERMINAL** is conveniently located within sight of downtown Dallas. It is adjacent to main line (foreground); to major highways; to T&P freighthouse (right), and to crane for handling demountable bodies.

# T&P Builds Special Auto Ramps

**► The Story at a Glance: To handle their new-found bonanza of new automobile traffic, railroads and railroad suppliers have quickly developed special equipment—bi- and tri-level rack cars and a variety of devices for loading and unloading them. Now some roads, at least, are going even farther, by constructing special terminal facilities, usable for any piggyback traffic, but built with auto business primarily in mind.**

To provide better service for its growing movement of new automobiles, the Texas & Pacific has just completed two special terminal facilities at Dallas, at a combined cost of around $250,000. Each terminal, though designed primarily for auto traffic, can also handle general TOFC cars and trailers.

One of the two new facilities is within sight of, and only half a mile from, the heart of downtown Dallas. Located in the new Trinity Industrial district, it is adjacent to an intersection of several east-west major highways, and to the T&P's Dallas freight station and public team tracks. The other new auto terminal is at Beeman and Haskell Avenues in East Dallas, adjacent to the railroad's East Dallas yard and to the local Ford assembly plant.

The Trinity site covers 2.6 acres just north of the freight station. It includes three tracks, each with a capacity of eight 85-ft Trailer-Train piggyback flat cars or auto rack cars, with room for a future fourth track of the same length. All three existing tracks are spanned, at the unloading end, by a 50-ft-wide,

(*Continued on page 67*)

**TOFC TRACKS** (right background) are connected with trailer parking area by permanent concrete ramp. Local freighthouse and demountable-body crane are at the left; a major access highway in the foreground.

**EAST DALLAS AUTO TERMINAL** has depressed tracks; Buck unloader for rack cars; car-floor level unloading platform for automobiles received in closed cars.

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## T&P BUILDS SPECIAL AUTO RAMPS (*Continued from page 65*)

reinforced concrete ramp with a 5-deg slope.

The East Dallas terminal, covering 4.1 acres, has three six-car depressed tracks, which put car floors at ground level.

One of the outside tracks is bordered by a wooden unloading platform, 16 ft by 264 ft, at car-floor height on one side and ground level on the other, to permit efficient unloading of specially-equipped closed-type auto cars. Bi- and tri-level rack cars will be serviced by one of the adjustable-ramp traveling unloaders manufactured by the Buck Equipment Corp., of Cincinnati (RA, Sept. 26, p. 56). Space is available for installation of three additional tracks when needed.

At each terminal, nighttime illumination is provided by 400-watt Wide-Lite mercury vapor lamps mounted about two to a car length between each pair of tracks. The light standards, designed and constructed by the railroad's signal shop at Marshall, each contain a receptacle with a separate circuit for operating the electric-powered wrenches used in raising and lowering the ACF hitches with which many TTX cars are now equipped. At Trinity all lights are just above car floor level, but at East Dallas each alternate light is high, to illuminate upper levels of rack cars. Parking lots at both points are lighted by pole-mounted 1,000-watt lamps.

Parking lots at both terminals are paved with asphalt, but have flat concrete strips set in at points where rear (power) wheels of tractors rest when picking up loaded trailers. This is intended to provide positive starting traction for the loaded highway units, especially during bad weather, by eliminating any chance that the wheels will settle into low spots in the asphalt.

Design of both terminals was checked with and approved by automobile company traffic managers.

Currently, most T&P auto shipments are Ford or General Motors cars, received from the Missouri Pacific at Texarkana; moved by rail from there to Dallas (217 miles), and thence fanned out by highway to final destination. Rates, generally, are on a Plan V joint rail-truck basis. With the new ramps at Dallas, the T&P will be able to handle arriving loads more efficiently, and also to originate rail loads for other points if necessary.

## Railroading After Hours with Jim Lyne

**REPUBLICAN INACTION**—A Chicago railroader—too modest to disclose his identity—has written in to chide us for the piece, addressed to President-elect Kennedy, on page 50 of our November 14 issue. Instead of laying the present unsatisfactory railroad situation in Mr. Kennedy's lap (as we did, because there now is no other lap to lay it in) our critic suggests we should have rapped the Republicans for slumbering for the past 8 years on the deteriorating situation of the railroads.

I share our correspondent's disappointment at the present administration's inactivity in the railroad sector—but what is past can't be altered.

Thanks to the inaction of the incumbents, Mr. Kennedy now has a golden opportunity for constructive action. This opportunity would have been denied the incoming chief executive, if President Eisenhower had moved vigorously to give effect to the wise counsel he got from his subordinates (e.g., the "Cabinet committee" and such Commerce Department advisors as Professor Ernest Williams and David Bluestone).

**DON'T QUIT TOO SOON**—A comedian at last week's RPI dinner told a story which isn't especially new, but seems to me to embody an appropriate text for the railroads at this time—when some railroaders seem to be a bit on the gloomy side about conditions and prospects.

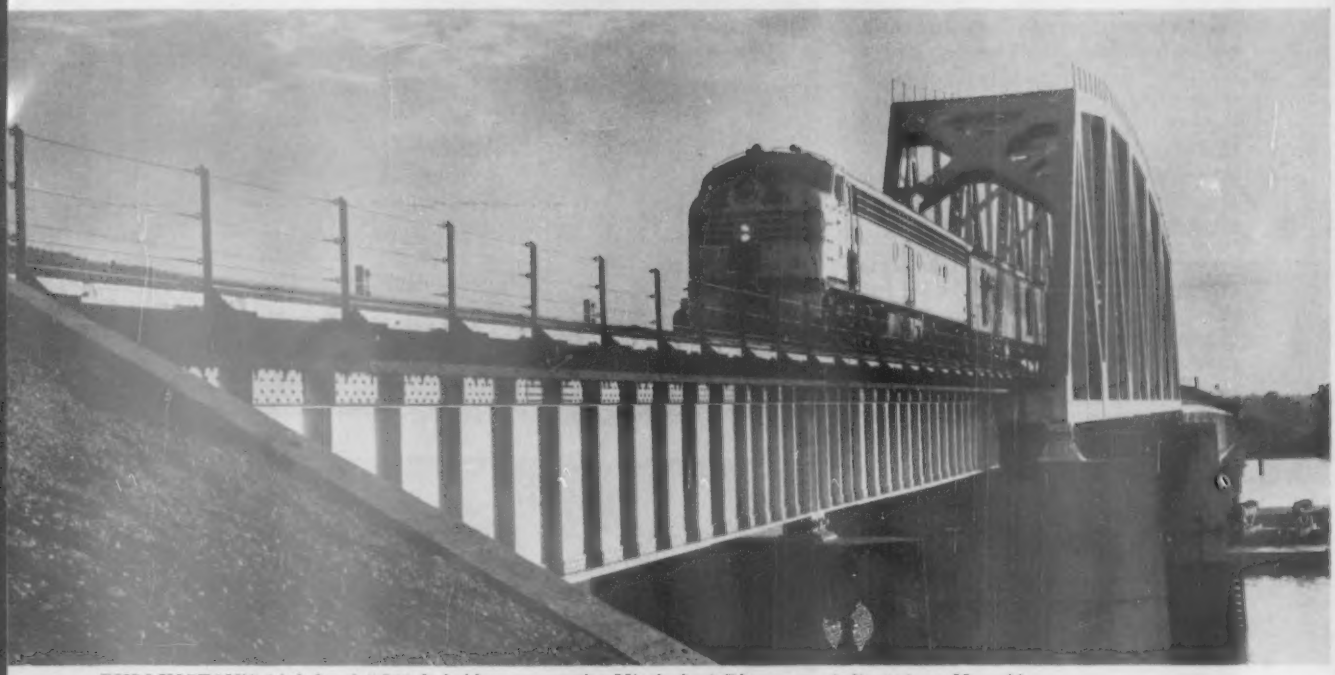
The story is that this fellow had an uncle who concocted a soft drink which he called "Four-Up." It didn't sell, so he improved his recipe and changed the name to "Five-Up." The new beverage didn't sell any better than its predecessor, so the inventor came along with an alternative known as "Six-Up." This, too, was a failure, so the poor fellow jumped out the window and was killed.

As the comedian remarked, his uncle didn't know how close he was to making a resounding success. That's the way the current railroad situation looks to me—no time to jump out the window.

**PHONE OPERATORS**—I've just heard that Agnes Hogan—for some 42 years telephone operator for the Central Territory Railroads at Chicago—is about to retire. Those in the know have told me about the valuable man-hours she has saved them by her memory and initiative, minimizing the location details she needed on individuals to be reached by phone. We had a veteran operator in our own shop until her recent retirement, who had a similarly remarkable and serviceable memory system.

With more and more business being done by phone, an operator who doesn't have to be given detailed information on parties called, every time they're wanted, is a real time-saver in any office.

**TRANSPORT POLICY IN BRITAIN** — On the British railways they have a union called the Transport Salaried Staff Association, the president of which (R. J. Gunter) is a member of parliament. In a recent speech before that body (reported in the union's publication) he took out after the government for not having "any real transport policy." The railways, said he, are still "denied equality of opportunity with their competitors." Quite likely he is right—but, compared with the inequalities besetting U.S. railroads, the British railways' position seems relatively easy. In any event, the latter are not restricted by regulation from making whatever rates they please, in order to get the business they want.



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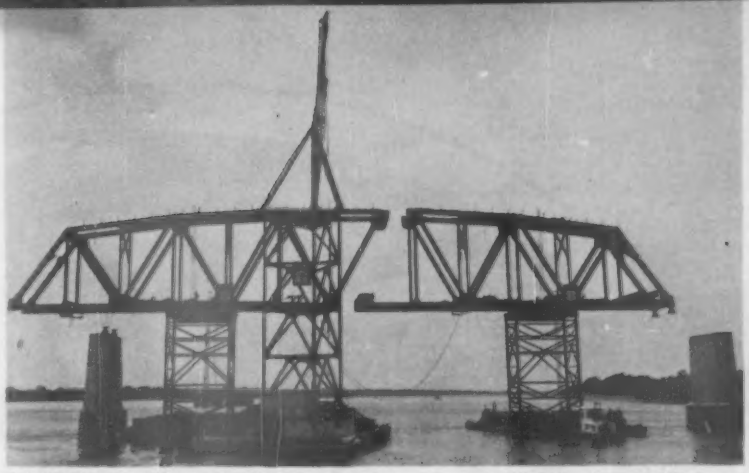
### *Ballast-Deck Structures*

All three structures are ballast-deck bridges designed for Cooper's E-72 loading in accordance with AREA specifications, with slight modifications. To facilitate inspection of the deck-truss spans, walkways and ladders were provided. Track rails on the bridges are fastened with compression clips. The rail used on the line change is the road's standard 129-lb torsion-resisting section.

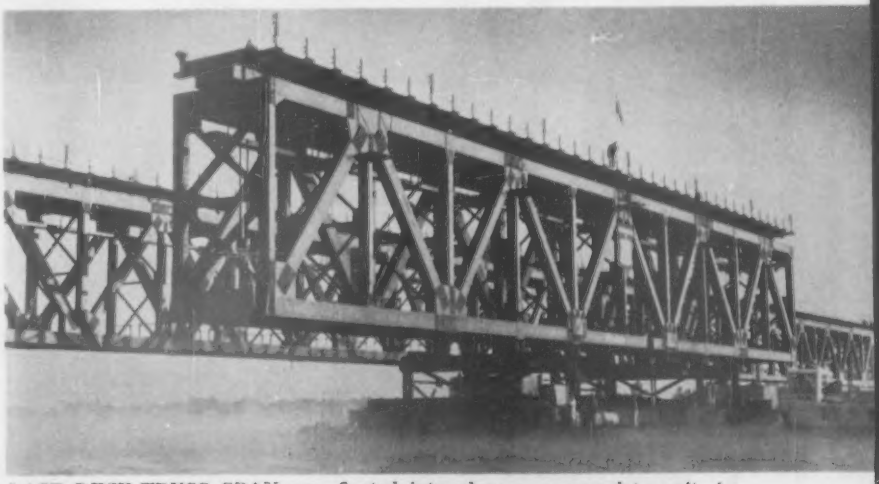
The three bridges are equipped with metal-grating walkways on both sides for the use of trainmen. Motor car setoffs are provided at intervals of 500 ft along the Mississippi River bridge. One setoff, near the center of the bridge, is equipped with a telephone.

Portions of the embankment on the new line are about 70 ft above natural ground. To provide a stable foundation for the embankment approximately 500,000 cu yd of top soil was removed by the LaCross Dredging Corporation, the dredging contractor. About 3.6 million cubic yards of fill were required to construct the embankments. Most of the fill was obtained from material dredged out of

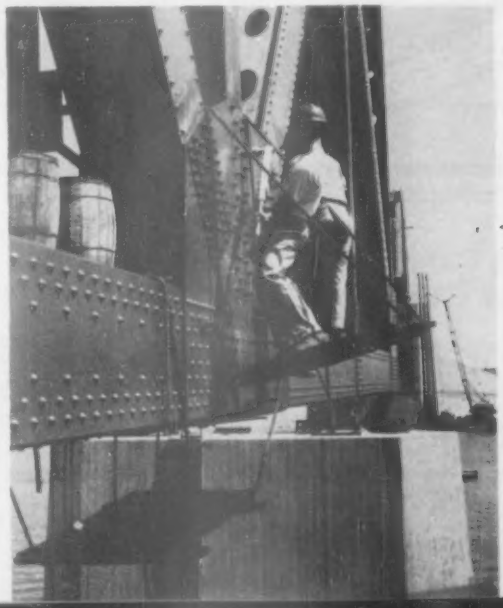
(*Continued on page 64*)



**THROUGH-TRUSS SPAN**, 336 ft long, was assembled in two sections on barges anchored alongside the piers on which it was to be placed. After the two sections were riveted together, barges were flooded to land the span on the piers.



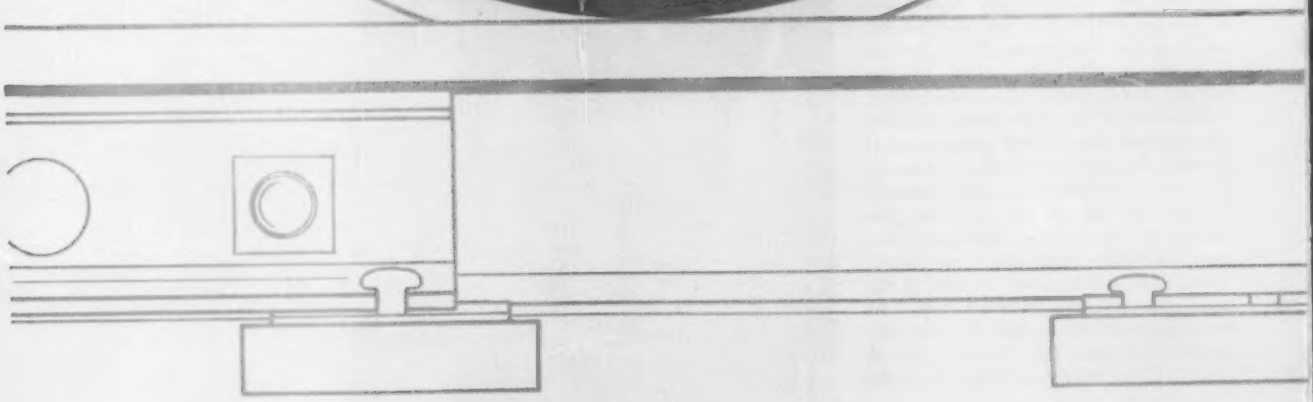
**LAST DECK-TRUSS SPAN** was floated into place as a complete unit, including stringers, timber deck and ties. It was assembled to one side to permit river traffic to use old channel during work.



◀ **HIGH-STRENGTH** bolts were used to assemble final two-thirds of the bridge. To assure proper tension was being applied, about 20% of all the nuts were checked with a torque wrench.

# STOP HOTBOX DELAYS

that result from Incorrect Lubrication



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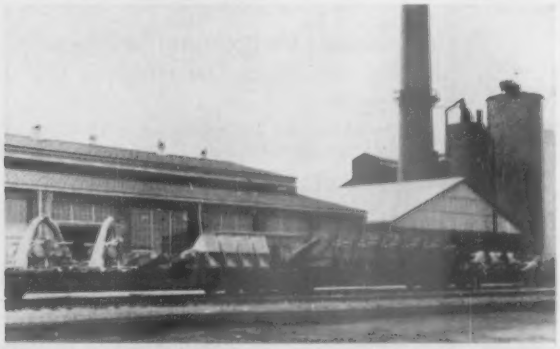

**Site-seeking industrialists** are quickly attracted to the C&O territory of abundant natural resources, plentiful labor, progressive communities, plus the fast, dependable service of a great railroad.

# fast, dependable shipping via pace-setting Chessie

Chessie's uncommon growth as a common carrier stems largely from its unmatched service to the industrial and commodity center of America. Chesapeake and Ohio Railway, now in its 175th year of transportation progress, is truly a pace-setter . . . anticipating the changing patterns of distribution and the movement of freight . . . pioneering new equipment and methods that streamline and speed-up your shipping operation.

This extra measure of service continues to help attract a wide variety of healthy and growing industries along The Chessie Route. A resourceful, service-minded C&O traffic man will quickly respond to your call for a convincing sample of C&O *outstandability.*

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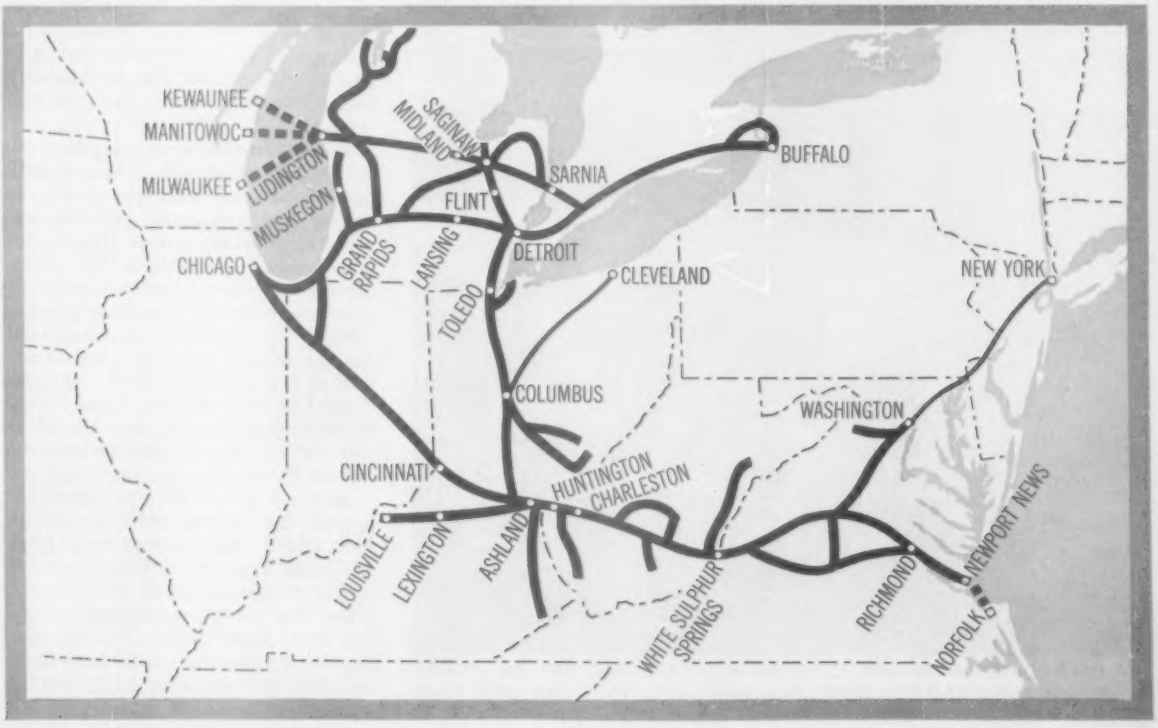
TERMINAL TOWER, CLEVELAND 1, OHIO

*Outstandability in Transportation*

**Chessie's Piggyback service** takes trucks off the highway and moves them faster, more economically between strategic points. RAILVAN, the truck trailer that converts to a freight car, is now being pioneered by Chessie.

**Chessie's outstandability** in transportation comes from management-inspired philosophy of providing an extra measure of service . . . with modern equipment . . . in the hands of resourceful, conscientious people . . . offering fast, dependable movement of your products.



## BRIDGE CLEARS RIVER TRAFFIC (*Continued from page 59*)

the river and from an island between the river and the bay.

The substructures of the three bridges were constructed by the Kansas City Bridge Company, Kansas City, Mo., which also constructed the timber decks on the bridges. The abutments and piers of the river and bay bridges are supported on steel H-piles which extend to bedrock. Some of these piles are 170 ft long. The west abutment of the bridge across North Bottom Road is also supported on steel piling. The east abutment and the piers of this bridge were landed directly on Mississippian limestone.

The contractor for steel erection was the Bethlehem Steel Company. One of its first tasks was the construction of a work harbor and an adjacent work area, including a dock. These facilities were at the east end of the old bridge, between it and the site of the new bridge. An 1,100-ft siding was constructed by the Burlington to serve the facilities.

Actual erection of steel began in April when assembly of the trusses began. Erection of the trusses and of the two shorter bridges progressed concurrently, the latter being completed during last summer. Each of the shorter bridges was erected by a 60-ton derrick car, equipped with a 70-ft boom, operating from the track on the new embankment.

All truss spans were assembled on barges anchored in the river adjacent to the piers on which they were to be placed. The 336-ft through span was the first truss span to be assembled and erected. It was assembled in two sections, each section supported by a falsework tower mounted on two barges. Due to high water, the early stages of assembly work took place in the shelter of the work harbor. When the high water subsided sufficiently, the barges were towed out into the river and anchored between the piers on which the span was to be erected.

When the two halves of the through span were completed they were brought together and connected by rivets while still supported on the barges. Approximately 45,000 gallons of water were pumped into one of the barges to bring it to the proper angle and elevation for joining the trusses. A few days later the span was lowered onto the piers. This was accomplished by flooding the barges enough to lower the span onto timber blocking about three feet high on the top of the piers. Four 250-ton hydraulic jacks, two on each pier, were then used to lower the span onto its bearings atop the piers.

Original plans called for lowering the span directly onto its bearings. Due to the high water the barges could not be lowered sufficiently to make that possible.

With the through span in place the erection crews commenced assembly work on the deck-truss spans. For this work, the falsework towers used to assembly the channel span were dismantled and reconstructed as two low bents on each set of barges. Each set was then anchored alongside the appropriate piers and a deck truss assembled on it. These spans were landed directly onto their bearings on the piers. When one span had been placed the barges would move to the next span, moving around the other set of barges if necessary. After each truss was in place on its piers, stringers were erected and the timber deck constructed. Ballast was then installed and track laid across the span.

The switch to high-strength bolts came after the two east deck-girder spans, the through-truss span and one deck-truss span had been erected. About 140,000 high-strength bolts were required to erect the final two-thirds of the bridge. Nuts for the bolts were run down by air wrenches set to apply the desired tension in the bolts. Some 20% of all the nuts were tested with a torque wrench as a check to assure that proper tension was being applied.

The only exception to the erection procedure outlined above was in the procedure followed in erecting the last deck truss span, which was placed over a portion of the old navigation channel. To keep the channel open for river traffic this closure span was assembled to one side.

To minimize delays to railroad and river traffic, the closure span was installed on its piers as a complete unit, that is, with stringers, timber deck, and ties in place. Rails and ballast were added immediately after the span was landed.

Railroad traffic began using the new bridge the following day. This enabled crews to start removing the portion of the old bridge extending over the new navigation channel. One truss span was removed immediately by reversing the procedure used to install the new trusses. In this operation a barge with its hold partially filled with water was placed under the span. Water was then pumped out until the span, which had been cut away from the remainder of the bridge, was free of its piers. It was then floated to the material dock and cut apart for scrap.

Removal of the span permitted restricted use of the new channel by river traffic. The two adjacent spans were then removed to permit removal of the two piers within the channel. When that work is completed, barges will have unrestricted use of the new channel. The balance of the old bridge, including the remaining piers, will be removed at a later date.

**NEW BRIDGE, 500 ft upstream from the previous bridge, provides a 300-ft clear channel and a 63-ft clearance above water level, permitting river traffic to pass underneath.**

**NEW TRINITY AUTO TERMINAL** is conveniently located within sight of downtown Dallas. It is adjacent to main line (foreground); to major highways; to T&P freighthouse (right), and to crane for handling demountable bodies.

# T&P Builds Special Auto Ramps

► **The Story at a Glance: To handle their new-found bonanza of new automobile traffic, railroads and railroad suppliers have quickly developed special equipment—bi- and tri-level rack cars and a variety of devices for loading and unloading them. Now some roads, at least, are going even farther, by constructing special terminal facilities, usable for any piggyback traffic, but built with auto business primarily in mind.**

To provide better service for its growing movement of new automobiles, the Texas & Pacific has just completed two special terminal facilities at Dallas, at a combined cost of around $250,000. Each terminal, though designed primarily for auto traffic, can also handle general TOFC cars and trailers.

One of the two new facilities is within sight of, and only half a mile from, the heart of downtown Dallas. Located in the new Trinity Industrial district, it is adjacent to an intersection of several east-west major highways, and to the T&P's Dallas freight station and public team tracks. The other new auto terminal is at Beeman and Haskell Avenues in East Dallas, adjacent to the railroad's East Dallas yard and to the local Ford assembly plant.

The Trinity site covers 2.6 acres just north of the freight station. It includes three tracks, each with a capacity of eight 85-ft Trailer-Train piggyback flat cars or auto rack cars, with room for a future fourth track of the same length. All three existing tracks are spanned, at the unloading end, by a 50-ft-wide,

(*Continued on page 67*)

**TOFC TRACKS** (right background) are connected with trailer parking area by permanent concrete ramp. Local freighthouse and demountable-body crane are at the left; a major access highway in the foreground.

**EAST DALLAS AUTO TERMINAL** has depressed tracks; Buck unloader for rack cars; car-floor level unloading platform for automobiles received in closed cars.

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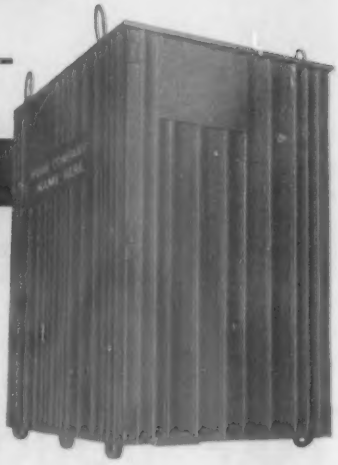

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## T&P BUILDS SPECIAL AUTO RAMPS (Continued from page 65)

reinforced concrete ramp with a 5-deg slope.

The East Dallas terminal, covering 4.1 acres, has three six-car depressed tracks, which put car floors at ground level.

One of the outside tracks is bordered by a wooden unloading platform, 16 ft by 264 ft, at car-floor height on one side and ground level on the other, to permit efficient unloading of specially-equipped closed-type auto cars. Bi- and tri-level rack cars will be serviced by one of the adjustable-ramp traveling unloaders manufactured by the Buck Equipment Corp., of Cincinnati (RA, Sept. 26, p. 56). Space is available for installation of three additional tracks when needed.

At each terminal, nighttime illumination is provided by 400-watt Wide-Lite mercury vapor lamps mounted about two to a car length between each pair of tracks. The light standards, designed and constructed by the railroad's signal shop at Marshall, each contain a receptacle with a separate circuit for operating the electric-powered wrenches used in raising and lowering the ACF hitches with which many TTX cars are now equipped. At Trinity all lights are just above car floor level, but at East Dallas each alternate light is high, to illuminate upper levels of rack cars. Parking lots at both points are lighted by pole-mounted 1,000-watt lamps.

Parking lots at both terminals are paved with asphalt, but have flat concrete strips set in at points where rear (power) wheels of tractors rest when picking up loaded trailers. This is intended to provide positive starting traction for the loaded highway units, especially during bad weather, by eliminating any chance that the wheels will settle into low spots in the asphalt.

Design of both terminals was checked with and approved by automobile company traffic managers.

Currently, most T&P auto shipments are Ford or General Motors cars, received from the Missouri Pacific at Texarkana; moved by rail from there to Dallas (217 miles), and thence fanned out by highway to final destination. Rates, generally, are on a Plan V joint rail-truck basis. With the new ramps at Dallas, the T&P will be able to handle arriving loads more efficiently, and also to originate rail loads for other points if necessary.

## Railroading After Hours with Jim Lyne

**REPUBLICAN INACTION**—A Chicago railroader—too modest to disclose his identity—has written in to chide us for the piece, addressed to President-elect Kennedy, on page 50 of our November 14 issue. Instead of laying the present unsatisfactory railroad situation in Mr. Kennedy's lap (as we did, because there now is no other lap to lay it in) our critic suggests we should have rapped the Republicans for slumbering for the past 8 years on the deteriorating situation of the railroads.

I share our correspondent's disappointment at the present administration's inactivity in the railroad sector—but what is past can't be altered.

Thanks to the inaction of the incumbents, Mr. Kennedy now has a golden opportunity for constructive action. This opportunity would have been denied the incoming chief executive, if President Eisenhower had moved vigorously to give effect to the wise counsel he got from his subordinates (e.g., the "Cabinet committee" and such Commerce Department advisors as Professor Ernest Williams and David Bluestone).

**DON'T QUIT TOO SOON**—A comedian at last week's RPI dinner told a story which isn't especially new, but seems to me to embody an appropriate text for the railroads at this time—when some railroaders seem to be a bit on the gloomy side about conditions and prospects.

The story is that this fellow had an uncle who concocted a soft drink which he called "Four-Up." It didn't sell, so he improved his recipe and changed the name to "Five-Up." The new beverage didn't sell any better than its predecessor, so the inventor came along with an alternative known as "Six-Up." This, too, was a failure, so the poor fellow jumped out the window and was killed.

As the comedian remarked, his uncle didn't know how close he was to making a resounding success. That's the way the current railroad situation looks to me—no time to jump out the window.

**PHONE OPERATORS**—I've just heard that Agnes Hogan—for some 42 years telephone operator for the Central Territory Railroads at Chicago—is about to retire. Those in the know have told me about the valuable man-hours she has saved them by her memory and initiative, minimizing the location details she needed on individuals to be reached by phone. We had a veteran operator in our own shop until her recent retirement, who had a similarly remarkable and serviceable memory system.

With more and more business being done by phone, an operator who doesn't have to be given detailed information on parties called, every time they're wanted, is a real time-saver in any office.

**TRANSPORT POLICY IN BRITAIN** — On the British railways they have a union called the Transport Salaried Staff Association, the president of which (R. J. Gunter) is a member of parliament. In a recent speech before that body (reported in the union's publication) he took out after the government for not having "any real transport policy." The railways, said he, are still "denied equality of opportunity with their competitors." Quite likely he is right—but, compared with the inequalities besetting U.S. railroads, the British railways' position seems relatively easy. In any event, the latter are not restricted by regulation from making whatever rates they please, in order to get the business they want.

Eric Wynne
CNR

John W. Demcoe
CNR

William J. Eck
C&O

Harold W. Brewer
C&O

# People in the News

**ASSOCIATION OF AMERICAN RAILROADS.—W. F. Henning,** district manager, Car Service Division, Minneapolis, Minn., transferred to Atlanta, Ga., succeeding **F. C. Rummel,** who retires Dec. 1. **B. W. Taylor,** assistant to vice chairman, Car Service Division, Washington, D. C., promoted to district manager, Dallas, Tex., succeeding **C. P. Wasson,** who also retires Dec. 1. **L. A. Dickson,** district manager, Omaha, succeeds Mr. Henning at Minneapolis. The Omaha district office will be closed and supervision of the area transferred to the St. Louis district office managed by **J. H. Blose.** Unaffected by this change is the office of field secretary, Central Western Shippers Advisory Board at Omaha. Functions of the district office, Cincinnati, will be discontinued and supervision transferred to **A. N. Gantzer,** district manager, Pittsburgh. The field secretary, Ohio Valley Transportation Advisory Board remains at Cincinnati. Supervision of the area served by the Boston district office will be assumed by **C. A. Lauby,** present district manager at New York. The field secretary, New England Shippers Advisory Board continues at Boston.

**CANADIAN NATIONAL.—John G. Davis,** assistant general superintendent, Maritime district, Moncton, appointed assistant manager, Maritime Area, and will deputize for **David Blair** (RA, Nov. 21, p. 35) in his absence.

Operations managers for the three new areas of the Atlantic region are: **Raymond Clarke,** Chaleur Area, Campbellton, N.B.; **Walter R. Mitchell,** Maritime Area, Moncton, N. B., and **E. J. Healy,** Newfoundland Area, St. John's. Mr. Clarke was formerly superintendent, Edmundston, N. B., division; Mr. Mitchell was acting superintendent, Northumberland division; and Mr. Healy was marine superintendent, CN's Newfoundland Coastal Services.

**William G. Davis,** general freight agent, Toronto, Ont., appointed regional freight sales manager of the newly created St. Lawrence region, Montreal. **James C. Crochetierre,** general freight agent, Central region, Montreal, named assistant regional freight sales manager at that point.

**Eric Wynne** named vice president of the newly created Great Lakes region at Toronto. **John W. Demcoe** appointed general manager, Atlantic region, Moncton (RA, Nov. 21, p. 35).

**CHESAPEAKE & OHIO.**—The following vice presidents have been named senior vice presidents: **John E. Kusik,** finance; **M. Irvine Dunn,** operations; and **Gregory S. DeVine,** coal traffic and development.

The jurisdiction of **A. W. Gillette,** trainmaster, Ludington, Mich., is extended to include the West Shore operations.

**Earl F. Hogan,** assistant trainmaster, Huntington, W. Va., named superintendent of the Washington & Old Dominion, C&O subsidiary, succeeding **James R. Cary III** (RA, Nov. 14, p. 47).

**William J. Eck** appointed general manager, purchases and stores department, Cleveland, and **Harold W. Brewer,** named director of purchases (RA, Nov. 14, p. 47.)

**CHICAGO & WESTERN INDIANA.—C. T. Peters,** chief electrician, Dearborn Station, Chicago, retires Nov. 30. **Carl E. Ross** appointed assistant engineer signal and electrical design, C&WI and Belt of Chicago.

**DEPARTMENT OF THE ARMY, OFFICE OF CHIEF OF TRANSPORTATION.—Forest V. Roam,** rate analyst, Freight division, Military Traffic Management Agency, retired. **William L. Wubbena,** assistant chief, Emergency Plans Branch, Policy and Plans Directorate, MTMA, retired.

**ELGIN, JOLIET & EASTERN.—E. M. Hughes** appointed senior supervisor of personnel, Chicago.

**GREAT NORTHERN.—Everett E. Brink,** car service agent, Great Falls, Mont., appointed assistant superintendent of transportation, Seattle, to succeed the late **Homer B. Bassett.**

**GULF, COLORADO & SANTA FE.—N. L. Andrews** appointed supervisor of transportation and better freight handling, Galveston, Tex., succeeding **S. H. Rawls,** supervisor of better freight handling, deceased.

**NEW YORK CENTRAL.—W. A. McGill,** signal supervisor, Cleveland, appointed general signal inspector, Western district, at that point, succeeding **E. C. Jackson,** who retired Oct. 31. **C. F. Hunt,** division engineer, Columbus, Ohio, transferred to the Mohawk- St. Lawrence division, Utica, N.Y., succeeding **George Auer,** retired.

**R. T. Tomlinson** appointed manager scrap and reclamation, Ashtabula, Ohio, effective Dec. 1., succeeding **John Voorhies,** retired.

**William A. Newman,** district freight sales manager, New York, appointed foreign freight sales manager there, succeeding **Frank J. Donovan,** promoted to assistant director, foreign freight sales, New York. **Nicholas R. Cosentino,** administrative assistant to director of foreign freight sales, named assistant foreign freight sales manager, New York.

**Terence A. McSherry,** former assistant to director of Flexi-Van sales and service, New York, named administrative assistant to vice president—freight sales.

**Henry K. Genett,** assistant passenger sales manager, Boston, Mass. transferred to Syracuse, N.Y.

**Charles W. Cole,** district car inspector, Syracuse, promoted to master mechanic, Weehawken, N.J.

**NORFOLK & WESTERN.—Fred L. Donaher,** coal traffic manager—service, named to the new position of coal traffic manager—engineering, Roanoke, Va. **Thomas C. Hamill,** industrial sales representative for Princess Coal Sales Co., Huntington, W. Va., succeeds Mr. Donaher.

**SOO LINE.—Mal A. Wigg** appointed general agent, Eau Claire, Wis.

**TEXAS & NEW ORLEANS.—J. P. Leach,** safety officer, San Antonio, Tex., promoted to trainmaster, Lafayette, La., to replace **F. E. Nichols,** retired.

## Industrial Traffic

**Leo Gallagher,** assistant general traffic manager—rates, **American Steel & Wire Division of United States Steel Corp.,** retires Oct. 31. **Charles E. Cronauer, Jr.,** has been appointed assistant general traffic manager of the division. **Frank O. Brady** has been named traffic manager—freight rates, general traffic department.

**Percy T. Brewbaker,** corporate manager of transportation, **Hooker Chemical Corp.,** Niagara Falls, N. Y., has assumed the additional responsibilities of traffic manager, Eastern Chemical Division. Several traffic specialists, formerly on a corporate basis, have now been placed directly in the Eastern Chemical Division. These specialists are: **Willard B. Horton,** senior traffic analyst; **Leo H. Machelor,** tank car supervisor; **C. Raymond Hoag,** traffic analyst; **Cecil J. Marshall,** rate specialist—rails; and **Edward H. Rychel,** rate specialist—motor carriers. Other division traffic managers are: **Chester D. Roberts,** Western Chemical Division, Tacoma, Wash.; **Arthur E. Finger,** Durez Plastics Division, North Tonawanda, N. Y.; and **Robert G. Thorn,** Phosphorus Division, Jeffersonville, Ind.

**Stirling T. Zimmerman** appointed general traffic manager, Central Office, **Chevrolet Division, General Motors Corp. Harold A. Stater,** assistant traffic manager, Chevrolet, Tarrytown, appointed traffic manager there. **John M. Reilly** named traffic manager, Chevrolet, Oakland, succeeding **George D. Cron,** retired. **Paul M. Miller** appointed traffic manager, Chevrolet, Baltimore. **Morley Smith,** assistant traffic manager, Chevrolet, Los Angeles, named traffic manager, Chevrolet, Indianapolis.

**Houston Merchants Exchange** has announced the affiliation of **Edwin E. Wyatt, Sr.,** consultant, specializing in car demurrage and grain traffic handling services, 7129 Harrisburg Blvd., Houston 11, Tex.

**Howard A. Mann,** executive manager, **Maritimes Transportation Commission,** Canada, resigned Oct. 15. **Craig S. Dickson,** secretary-treasurer, appointed acting executive manager and treasurer. **Ramsay M. S. Armitage,** traffic analyst, appointed secretary of the commission. **Earl T. Steeves** named transport economist, effective Jan. 1, 1961. Mr. Steeves is now executive assistant, Nova Scotia Teachers' Union, Halifax.

## Shippers' Guide

### Baltimore & Ohio

*. . . Extends 'Tofcee'*

Has ordered, for December delivery, 105 additional demountable bodies for refrigerated trailers, insulated and dry vans, and 102 chassis for handling the bodies. In conjunction with the Reading and the Western Maryland, has extended its interline Tofcee (piggyback) service via the Central States Despatch Route, with rates published to apply in both directions between eight major B&O stations and Reading points. Further expansion of this service under Plans II and III is anticipated in the near future.

### Boston & Maine

*. . . Expands Piggyback*

With its western connections, the B&M has inaugurated early second-morning service, both ways, between B&M points and Chicago and East St. Louis. Has also substituted trailers for box cars to move regular rail less-carload freight to Chicago, increasing tonnage from 7,400 lb to 16,000 lb average per trailer on a bi-weekly forwarding. Is considering extending the same substitution to "other points that might be served better through these operations, which provide fast service at rates generally less than the motor carrier level."

Has established in its traffic department a special "piggyback task team" to deal exclusively with TOFC sales and related matters, but without relieving regular traffic salesmen from their TOFC sales responsibilities.

Has opened a new piggyback ramp at East Fitchburg, Mass.; improved the one at Worcester, Mass., and built an entirely new and enlarged facility at Holyoke, Mass., to serve the increasing volume of piggyback traffic originating in the Holyoke-Springfield area.

Work is also under way on revamping the piggyback facility at East Cambridge, Mass., to do away with permanent ramps and circus-type loading and unloading. Plans call for doubling capacity for handling traffic on and off flat cars by installing three mobile overhead-lift straddle cranes which can handle trailers, containers or other freight to and from flat or gondola cars.

### Chesapeake & Ohio

*. . . Car Line Changes*

Has discontinued direct LCL refrigerator cars from Richmond, Va., to Chicago (Mondays) and to Detroit and Chicago (Fridays).

### Lehigh Valley

*. . . Expands Piggyback*

Has inaugurated Plan I piggyback service, to supplement Plans II and III

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**For shipping oils**

**or coils**

**or aluminum foils**

**The better way is Santa Fe**

No matter what you ship call the nearest Santa Fe Traffic Office and let the "railroad that's always on the move toward a better way" go to work for you.

Santa Fe


previously offered. Has increased its TOFC equipment to 236 cars and 211 trailers, by addition of 35 new 40-ft van-type units. To expedite handling of piggyback traffic at Grand street, Jersey City, N.J., has supplemented its existing ramp by construction of a new ramp, served by tracks from either side.

. . . *New Traffic Office*

To serve the Montreal area, has opened a new traffic office at 468 Bourke Ave., Dorval, Que., with D. G. Jamieson as traffic representative.

### Missouri Pacific

. . . *Piggyback Equipment*

To expand its conventional piggyback method of handling new automobiles, has ordered 13 bi-level, and 77 tri-level, flat car frames, each holding, respectively, 10 and 15 compact autos.

### Reading

. . . *Expands Piggyback*

Has inaugurated a new piggyback service to and from Detroit, via the Detroit, Toledo & Ironton, with second-morning arrival each way. In connection with other roads in the "Alphabet" route, has established a faster "Alpha-jet" schedule, both east and westbound, with early second-morning arrivals at Philadelphia, Reading and Harrisburg, and Nickel Plate points.

## Traffic Publications

**BETTER WAYS TO PACKAGE, UNITIZE AND SHIP. 40 pages, illustrations. Signode Steel Strapping Co., Dept. RA, 2600 North Western Ave., Chicago 47.**

This is the 20th edition of Signode's basic reference guide to strapping methods and tools.

**GENERAL CATALOG on strapping tools and supplies. 60 pages, illustrations. A. J. Gerrard & Co., 400 East Touhy Ave., Des Plaines, Ill.**

Spiral-bound, thumb-indexed catalog describes strapping equipment; gives strapping recommendations for different types of packages.

## Supply Trade

**Norman W. Kimmel,** plant manager of the Fort Wayne, Ind., division, **Dana Corp.,** has been appointed director of purchasing and production control, Toledo, Ohio.

**Vascoloy-Ramet** has appointed the following sales agents for railroad tooling: T. C. Johnson Co., Chagrin Falls, Ohio; Ross Co., St. Louis; Harbil, Inc., Chicago; R. Lightfoot, Louisville, Ky. and Mountain Region Supply, Omaha, Neb. Two newly appointed distributors for railroad tooling are: Tool Supply Co., Minneapolis, Minn. and Kirk-Wiklund & Co., Kansas City, Mo.

**Hugh W. Foster,** marketing manager for the sales department, **Pullman-Standard,** has been


the Sign of

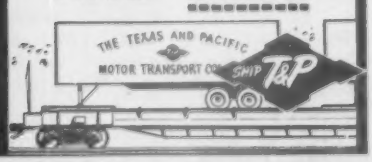
**Dependable Freight Transportation**

*"Everywhere West"*

**CHICAGO, BURLINGTON & QUINCY RAILROAD**

FAST FREIGHT SERVICE Call T&P RAILWAY

SHIP IT PIGGYBACK AND SAVE




THE TEXAS & PACIFIC RAILWAY COMPANY

appointed manager of marketing—coordinated transport systems, **Transport Leasing Co.**

**Robert L. Pancoast,** assistant divisional comptroller, **Electro-Motive Division** of **General Motors,** has been promoted to comptroller, to succeed **Guy D. Briggs, Jr.,** advanced to a new position in **General Motors Overseas Operations Division.**

**W. G. Kendall,** a sales engineer, New York district office, Railway Sales, **Union Switch & Signal—Division of Westinghouse Air Brake Co.,** has been transferred to the Chicago district office in the same capacity. **R. H. Tomlinson,** a sales engineer, Pittsburgh district office, transferred to the New York district office.

**C. M. Shepstone** has been appointed a sales engineer for **Dana Corp.,** working on the Toledo, Ohio, home office staff. **Norman W. Kimmel** has been appointed director of purchasing and production control, Toledo.

**Joseph F. Clary** has been appointed vice president sales, Railway division, **Budd Co.,** Philadelphia, Pa. Mr. Clary has been a divisional vice president in charge of Western region railway sales.

**Bruce M. Jones,** assistant to president, **Buffalo Brake Beam Co.,** retired. **D. F. Gladwell,** engineer, has been promoted to chief engineer, New York, effective Dec. 1, and will assume Mr. Jones' duties.

**Richard A. Pinney** has been appointed Eastern sales manager, **Unity Railway Supply Company,** Chicago, with headquarters at Pittsburgh. He will also represent the **M & J Diesel Filter Company,** Chicago, in Eastern areas.

**Robert C. Main** has joined **Sperry Products Co.,** division of Howe Sound Co. as manager of engineering, a newly created position. Mr. Main was formerly engineering manager of the Missiles and Space systems division, United Aircraft.

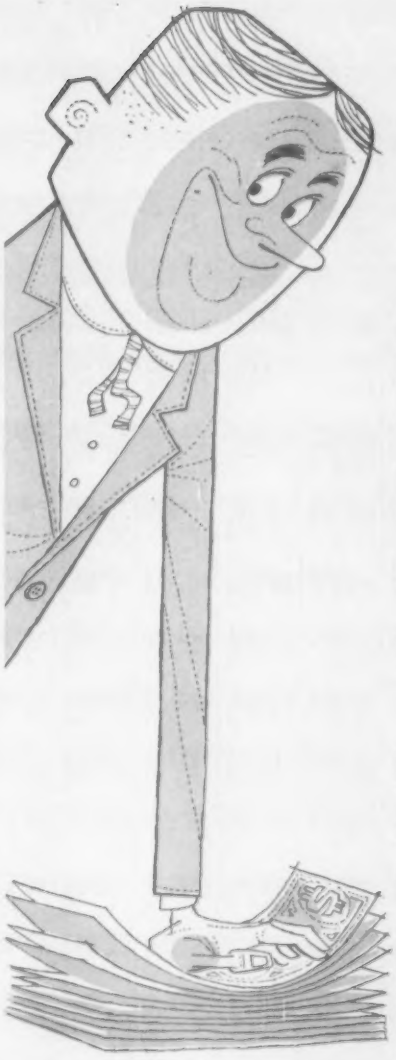
**Harold P. Gustavson,** manager of utility sales, LaGrange, Ill., **Electro-Motive Division** of **General Motors,** has been appointed manager of utility sales, Chicago region, succeeding **Floyd E. von Ohlen,** named regional representative, San Francisco region.

**Robert L. Smallman** has been named vice president—marketing of **Servo Corp. of America,** Hicksville, N. Y. Mr. Smallman joins Servo following 13 years in a similar capacity with Consolidated Electrodynamics Corp., Pasadena, Calif.

The **Mead Corp.** has organized a New Products Division to study packaging problems from the production line to the receiving point in a wide variety of industries, with special reference to the capacity of package to stand up during transportation.

**John Robert Tench,** vice president of personnel and labor relations **Gould-National Batteries, Inc.,** has been appointed vice president in charge of sales of industrial batteries, Trenton, N.J., succeeding **M. W. Heinritz,** who will remain with the company as a vice president and be associated with the Industrial division in an advisory capacity.

Sales representatives appointed for ULOK air filters, **Union Carbide Development Co.,** are: Air-Pak Products, New York; Sanford Mechanical Equipment Co., Oakland, Calif.; Active Fireproof & Duct Cleaning Corp. of Pennsylvania; Howard V. Caton, Charlotte, N. C.

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International Cabooses are designed with these aims in mind — to render long years of service under today's high speed, long train conditions, with the absolute minimum of maintenance. This they do — and cost records on many railroads prove it. Each model incorporates welcome advances in train crew safety and comfort. Find out why it pays, in many ways, to deal with specialists in the caboose building business. Write International Car Division, 2485 Walden Ave., Buffalo 25, N. Y.

INTERNATIONAL Cabooses

Rolling Up Records for Safety and Economy on America's Leading Railroads

INTERNATIONAL CAR DIVISION

A SUBSIDIARY OF RYDER SYSTEM, INC.

# REVENUES AND EXPENSES OF RAILWAYS

*(Dollar figures are stated in thousands: i.e., with last three digits omitted)*

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1960

| Name of Road | | Average mileage operated during period | Operating Revenues: Freight | Operating Revenues: Pass. | Operating Revenues: Total (inc. misc.) 1960 | Operating Revenues: Total (inc. misc.) 1959 | Operating Expenses: Maint. Way and Structures: Total 1960 | Operating Expenses: Maint. Way and Structures: Total 1959 | Operating Expenses: Maint. Way and Structures: Deprec. and Retirements | Operating Expenses: Maint. Equipment: Total 1960 | Operating Expenses: Maint. Equipment: Total 1959 | Operating Expenses: Maint. Equipment: Deprec. and Retirements | Operating Expenses: Traffic | Operating Expenses: Transportation | Operating Expenses: Total 1960 | Operating Expenses: Total 1959 | Operating ratio: 1960 | Operating ratio: 1959 | Net from railway operation | Railway tax accruals | Net Railway operating income: 1960 | Net Railway operating income: 1959 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Akron, Canton & Youngstown | Sept. | 171 | 489 | .... | 501 | 423 | 56 | 62 | 6 | 71 | 74 | 16 | 46 | 152 | 369 | 362 | 73.7 | 85.5 | 132 | 70 | 35 | 7 |
| | 9 mos. | 171 | 4,364 | .... | 4,478 | 4,510 | 513 | 539 | 51 | 696 | 675 | 140 | 415 | 1,417 | 3,401 | 3,397 | 77.5 | 75.3 | 1,017 | 620 | 309 | 319 |
| Alabama, Tennessee & Northern | Sept. | 214 | 213 | .... | 217 | 271 | 55 | 50 | 7 | 2 | 4 | 6 | 5 | 74 | 141 | 155 | 64.8 | 57.1 | 76 | 11 | 22 | 21 |
| | 9 mos. | 214 | 2,028 | .... | 2,060 | 2,585 | 491 | 449 | 58 | 112 | 97 | 51 | 49 | 768 | 1,445 | 1,376 | 70.1 | 53.2 | 615 | 77 | 59 | 216 |
| Atchison, Topeka & Santa Fe | Sept. | 12,970 | 37,496 | 3,093 | 45,483 | 47,680 | 6,367 | 7,157 | 754 | 10,181 | 10,683 | 2,576 | 1,390 | 19,091 | 39,697 | 39,527 | 87.3 | 82.9 | 5,786 | 3,732 | 1,130 | 3,058 |
| | 9 mos. | 12,970 | 386,067 | 31,127 | 459,631 | 475,739 | 60,024 | 61,180 | 7,007 | 96,229 | 95,943 | 22,037 | 12,774 | 172,498 | 363,259 | 359,327 | 79.0 | 75.5 | 96,371 | 57,782 | 31,496 | 43,623 |
| Atlanta & St. Andrews Bay | Sept. | 81 | 276 | .... | 281 | 274 | 32 | 33 | 3 | 30 | 31 | 8 | 8 | 74 | 168 | 165 | 59.2 | 60.2 | 115 | 49 | 27 | 31 |
| | 9 mos. | 81 | 2,654 | .... | 2,702 | 2,954 | 295 | 357 | 32 | 262 | 279 | 71 | 65 | 668 | 1,496 | 1,577 | 55.4 | 53.4 | 1,206 | 528 | 334 | 440 |
| Atlanta & West Point | Sept. | 93 | 248 | 15 | 309 | 308 | 35 | 41 | 8 | 50 | 50 | 14 | 19 | 135 | 263 | 264 | 85.0 | 85.5 | 46 | 16 | .... | —1 |
| | 9 mos. | 93 | 2,120 | 210 | 2,769 | 2,844 | 361 | 368 | 71 | 449 | 472 | 128 | 164 | 1,174 | 2,347 | 2,393 | 84.8 | 84.1 | 422 | 160 | 24 | 84 |
| Western of Alabama | Sept. | 133 | 238 | 14 | 287 | 333 | 39 | 57 | 9 | 56 | 59 | 19 | 22 | 134 | 276 | 291 | 95.9 | 87.1 | 12 | 22 | —13 | 8 |
| | 9 mos. | 133 | 2,410 | 194 | 2,950 | 3,151 | 405 | 464 | 87 | 526 | 532 | 171 | 193 | 1,241 | 2,570 | 2,607 | 87.1 | 82.7 | 380 | 309 | 50 | 167 |
| Atlantic Coast Line | Sept. | 5,572 | 9,794 | 613 | 11,238 | 12,378 | 1,206 | 1,680 | 163 | 2,224 | 2,315 | 718 | 516 | 4,931 | 9,586 | 10,328 | 85.3 | 83.4 | 1,652 | 950 | 444 | 714 |
| | 9 mos. | 5,573 | 102,196 | 11,841 | 123,080 | 121,659 | 16,141 | 17,656 | 1,594 | 22,534 | 22,067 | 6,192 | 4,579 | 48,696 | 98,969 | 98,854 | 80.4 | 81.3 | 24,111 | 12,000 | 6,871 | 7,924 |
| Baltimore & Ohio | Sept. | 5,909 | 30,656 | 1,220 | 34,940 | 29,620 | 3,191 | 3,222 | 496 | 5,732 | 5,531 | 1,082 | 909 | 14,384 | 26,129 | 24,897 | 74.8 | 84.1 | 8,811 | 2,333 | 3,411 | 763 |
| | 9 mos. | 5,909 | 261,122 | 12,500 | 297,830 | 296,252 | 32,146 | 32,363 | 4,562 | 57,516 | 53,756 | 9,672 | 8,530 | 130,682 | 246,225 | 239,181 | 82.7 | 80.7 | 51,605 | 22,307 | 9,486 | 21,279 |
| Staten Island Rapid Transit | Sept. | 29 | 158 | 90 | 252 | 292 | 69 | 59 | 12 | 43 | 38 | 1 | 2 | 152 | 303 | 285 | 119.9 | 97.5 | —50 | 55 | —127 | —66 |
| | 9 mos. | 29 | 1,490 | 814 | 2,371 | 2,491 | 545 | 481 | 115 | 416 | 354 | 11 | 19 | 1,383 | 2,651 | 2,569 | 111.8 | 103.1 | —280 | 453 | —908 | —718 |
| Bangor & Aroostook | Sept. | 596 | 717 | 18 | 793 | 715 | 165 | 168 | 22 | 271 | 258 | 108 | 34 | 283 | 818 | 807 | 103.1 | 112.8 | —25 | 97 | 6 | 43 |
| | 9 mos. | 597 | 9,937 | 178 | 10,538 | 10,206 | 2,565 | 2,454 | 196 | 2,476 | 2,530 | 985 | 308 | 3,188 | 9,276 | 9,193 | 88.0 | 90.1 | 1,262 | 913 | 1,517 | 1,351 |
| Bessemer & Lake Erie | Sept. | 203 | 1,983 | .... | 2,040 | 488 | 265 | 306 | 24 | 717 | 535 | 141 | 35 | 431 | 1,638 | 1,371 | 80.3 | 280.8 | 402 | 647 | 173 | —299 |
| | 9 mos. | 203 | 18,152 | .... | 18,872 | 15,365 | 2,413 | 2,258 | 229 | 5,661 | 5,750 | 826 | 337 | 4,304 | 14,349 | 13,681 | 76.0 | 89.0 | 4,523 | 4,809 | 3,072 | 1,991 |
| Boston & Maine | Sept. | 1,557 | 4,465 | 431 | 5,328 | 5,599 | 856 | 695 | 162 | 855 | 835 | 225 | 155 | 2,388 | 4,433 | 4,483 | 83.2 | 88.1 | 896 | 515 | —128 | —152 |
| | 9 mos. | 1,557 | 43,066 | 4,505 | 51,581 | 54,832 | 5,816 | 7,046 | 1,342 | 7,676 | 7,837 | 2,180 | 1,452 | 22,150 | 40,269 | 44,317 | 78.1 | 80.8 | 11,312 | 4,218 | 2,188 | 1,376 |
| C. P. R. Lines in Maine | Sept. | 234 | 332 | 50 | 408 | 522 | 111 | 127 | 20 | 45 | 87 | 18 | 21 | 137 | 347 | 431 | 84.9 | 82.7 | 62 | 32 | —13 | 4 |
| | 9 mos. | 234 | 5,493 | 417 | 6,158 | 6,206 | 859 | 1,187 | 182 | 797 | 981 | 158 | 181 | 1,629 | 3,727 | 4,193 | 68.5 | 67.6 | 2,431 | 302 | 1,409 | 1,000 |
| Carolina & Northwestern | Sept. | 284 | 290 | .... | 295 | 299 | 26 | 46 | 8 | 32 | 32 | 21 | 6 | 71 | 151 | 181 | 51.2 | 60.7 | 144 | 32 | 73 | 42 |
| | 9 mos. | 284 | 2,320 | .... | 2,370 | 2,500 | 287 | 414 | 64 | 268 | 280 | .... | 49 | 698 | 1,420 | 1,605 | 60.0 | 64.2 | 950 | 191 | 371 | 268 |
| Central of Georgia | Sept. | 1,745 | 2,839 | 120 | 3,153 | 3,629 | 517 | 528 | 57 | 703 | 745 | 203 | 169 | 1,398 | 3,011 | 3,061 | 85.5 | 84.4 | 143 | 283 | —97 | 318 |
| | 9 mos. | 1,745 | 28,280 | 1,120 | 31,248 | 33,104 | 4,887 | 5,152 | 434 | 6,557 | 6,345 | 1,722 | 1,550 | 12,991 | 27,797 | 27,950 | 89.0 | 84.4 | 3,451 | 2,518 | 997 | 2,853 |
| Central of New Jersey | Sept. | 593 | 3,751 | 533 | 4,860 | 4,304 | 472 | 458 | 96 | 688 | 689 | 144 | 68 | 2,064 | 3,546 | 3,486 | 73.0 | 81.0 | 1,314 | 524 | 346 | 259 |
| | 9 mos. | 594 | 31,030 | 4,273 | 38,791 | 39,436 | 4,297 | 4,472 | 870 | 6,861 | 7,050 | 1,822 | 670 | 19,039 | 32,123 | 33,606 | 82.8 | 85.2 | 6,667 | 4,534 | —1,073 | 69 |
| Central Vermont | Sept. | 375 | 594 | 28 | 689 | 814 | 226 | 490 | 18 | 97 | 98 | 9 | 18 | 355 | 737 | 993 | 106.9 | 122.0 | —48 | 58 | —217 | —376 |
| | 9 mos. | 375 | 6,203 | 459 | 7,252 | 7,927 | 1,740 | 2,030 | 162 | 1,012 | 986 | 84 | 169 | 3,092 | 6,367 | 6,727 | 87.8 | 84.9 | 885 | 508 | —620 | 405 |
| Chesapeake & Ohio | Sept. | 5,122 | 26,857 | 479 | 29,146 | 27,129 | 3,600 | 3,500 | 492 | 5,193 | 4,969 | 1,916 | 823 | 10,804 | 22,331 | 21,102 | 76.6 | 77.8 | 6,815 | 2,459 | 4,488 | 3,929 |
| | 9 mos. | 5,122 | 243,050 | 4,612 | 261,615 | 261,069 | 30,500 | 29,230 | 4,266 | 47,495 | 45,978 | 17,117 | 7,548 | 96,797 | 197,109 | 193,552 | 75.3 | 74.1 | 64,506 | 30,221 | 37,342 | 41,019 |
| Chicago & Eastern Illinois | Sept. | 862 | 2,352 | 188 | 2,729 | 2,853 | 346 | 345 | 30 | 549 | 513 | 151 | 144 | 1,191 | 2,445 | 2,342 | 89.6 | 82.1 | 284 | 239 | —115 | 33 |
| | 9 mos. | 862 | 21,868 | 1,623 | 25,953 | 27,361 | 3,297 | 3,236 | 281 | 4,855 | 4,509 | 1,601 | 1,257 | 10,781 | 21,811 | 21,381 | 84.0 | 78.1 | 4,143 | 2,118 | 315 | 1,887 |
| Chicago & Illinois Midland | Sept. | 121 | 650 | .... | 862 | 814 | 54 | 41 | 7 | 116 | 97 | 23 | 30 | 157 | 403 | 356 | 60.9 | 51.9 | 259 | 136 | 119 | 142 |
| | 9 mos. | 121 | 5,463 | .... | 5,587 | 5,465 | 428 | 302 | 73 | 1,001 | 898 | 208 | 273 | 1,398 | 3,535 | 3,272 | 63.3 | 59.9 | 2,052 | 1,148 | 881 | 879 |
| Chicago & North Western | Sept. | 9,278 | 14,372 | 1,407 | 16,763 | 16,568 | 2,326 | 2,744 | 84 | 3,217 | 2,987 | 1,023 | 506 | 7,232 | 14,269 | 14,694 | 85.1 | 88.7 | 2,494 | 1,102 | —32 | —751 |
| | 9 mos. | 9,279 | 132,280 | 13,249 | 155,598 | 163,589 | 24,896 | 26,666 | 3,305 | 27,269 | 27,811 | 9,302 | 4,980 | 65,869 | 132,226 | 139,417 | 85.0 | 85.2 | 23,371 | 12,282 | 1,561 | 3,642 |
| Chicago, Burlington & Quincy | Sept. | 8,660 | 17,028 | 1,652 | 20,846 | 21,091 | 3,201 | 3,065 | 429 | 4,085 | 3,755 | 1,121 | 584 | 8,744 | 17,855 | 17,000 | 85.7 | 80.6 | 2,991 | 1,460 | 701 | 1,522 |
| | 9 mos. | 8,661 | 149,727 | 16,569 | 185,502 | 196,395 | 25,314 | 27,777 | 3,634 | 35,421 | 38,494 | 9,870 | 5,692 | 76,582 | 152,657 | 159,717 | 82.3 | 81.3 | 32,845 | 17,781 | 11,486 | 13,667 |
| Chicago Great Western | Sept. | 1,469 | 2,599 | 7 | 2,786 | 2,797 | 377 | 410 | 50 | 459 | 403 | 129 | 116 | 982 | 2,857 | 1,986 | 73.8 | 71.0 | 729 | 272 | 162 | 259 |
| | 9 mos. | 1,469 | 22,844 | 79 | 24,668 | 25,722 | 3,235 | 3,765 | 414 | 3,896 | 3,818 | 1,140 | 1,103 | 8,823 | 17,860 | 18,108 | 72.4 | 70.4 | 6,808 | 2,533 | 1,820 | 2,818 |
| Chic., Milw., St. P. & Pac | Sept. | 10,596 | 16,724 | 1,191 | 20,166 | 20,754 | 2,893 | 3,299 | 416 | 3,234 | 3,459 | 888 | 529 | 7,993 | 15,954 | 16,752 | 79.1 | 80.7 | 4,212 | 1,685 | 1,178 | 1,171 |
| | 9 mos. | 10,598 | 142,807 | 11,656 | 173,226 | 183,988 | 26,574 | 29,746 | 3,872 | 29,948 | 32,057 | 7,944 | 5,084 | 70,735 | 143,509 | 151,899 | 82.8 | 82.6 | 29,717 | 15,396 | 5,059 | 9,502 |
| Chicago, Rock Island & Pacific | Sept. | 7,451 | 13,461 | 1,193 | 16,278 | 16,701 | 2,274 | 2,317 | 287 | 2,836 | 3,281 | 650 | 544 | 7,142 | 13,706 | 13,994 | 84.2 | 83.8 | 2,572 | 1,205 | 249 | 599 |
| | 9 mos. | 7,533 | 135,093 | 12,631 | 162,891 | 168,905 | 21,937 | 21,150 | 2,336 | 27,445 | 29,065 | 5,946 | 4,961 | 66,314 | 131,531 | 129,460 | 79.5 | 77.9 | 33,431 | 14,339 | 6,636 | 8,793 |
| Clinchfield | Sept. | 293 | 1,549 | 1 | 1,577 | 1,695 | 173 | 250 | 21 | 306 | 303 | 100 | 71 | 2390 | 1,013 | 1,128 | 64.3 | 66.5 | 564 | 198 | 346 | 509 |
| | 9 mos. | 293 | 14,151 | 1 | 14,924 | 15,831 | 1,722 | 1,964 | 201 | 2,990 | 2,893 | 953 | 600 | 3,909 | 9,845 | 9,988 | 66.0 | 63.1 | 5,078 | 1,846 | 4,482 | 5,321 |
| Colorado & Southern | Sept. | 712 | 984 | 69 | 1,215 | 1,097 | 224 | 135 | 22 | 228 | 237 | 81 | 32 | 578 | 1,150 | 998 | 94.6 | 91.0 | 66 | 97 | —42 | —30 |
| | 9 mos. | 712 | 9,554 | 757 | 11,735 | 12,007 | 1,708 | 2,308 | 201 | 1,907 | 2,161 | 713 | 314 | 4,967 | 9,561 | 10,397 | 81.5 | 86.6 | 2,173 | 1,293 | 765 | 410 |
| Ft. Worth & Denver | Sept. | 1,362 | 1,637 | 141 | 1,994 | 2,450 | 611 | 245 | 39 | 289 | 338 | 46 | 69 | 842 | 1,955 | 1,652 | 98.1 | 67.4 | 38 | Cr. 67 | —137 | 220 |
| | 9 mos. | 1,362 | 15,067 | 1,404 | 18,457 | 19,412 | 2,560 | 3,276 | 292 | 2,330 | 2,660 | 415 | 644 | 7,601 | 14,309 | 15,531 | 77.5 | 80.0 | 4,148 | 1,332 | e 681 | 575 |
| Colorado & Wyoming | Sept. | 39 | 84 | .... | 183 | 26 | 21 | 11 | 2 | 18 | 21 | 12 | 2 | 83 | 143 | 69 | 77.7 | 269.2 | 41 | 33 | 7 | —33 |
| | 9 mos. | 39 | 1,559 | .... | 2,874 | 2,681 | 195 | 164 | 21 | 264 | 300 | 112 | 19 | 1,117 | 1,758 | 1,536 | 61.2 | 57.3 | 1,116 | 695 | 376 | 415 |
| Delaware & Hudson | Sept. | 763 | 3,014 | 126 | 3,255 | 3,665 | 414 | 413 | 61 | 642 | 668 | 195 | 105 | 1,308 | 2,744 | 2,815 | 84.3 | 76.8 | 511 | 380 | 168 | 491 |
| | 9 mos. | 763 | 30,493 | 1,177 | 32,908 | 34,515 | 3,931 | 3,811 | 568 | 7,131 | 6,195 | 1,788 | 970 | 12,524 | 26,961 | 26,459 | 81.9 | 76.7 | 5,947 | 3,439 | 3,961 | 4,612 |
| Delaware, Lack. & Western | Sept. | 942 | 4,173 | 745 | 5,917 | 5,752 | 387 | 489 | 166 | 947 | 1,003 | 336 | 181 | 3,043 | 5,025 | 5,085 | 84.9 | 88.4 | 892 | 702 | —16 | —139 |
| | 9 mos. | 941 | 38,797 | 6,531 | 52,634 | 53,842 | 4,920 | 4,845 | 1,364 | 9,293 | 9,204 | 3,043 | 1,774 | 27,812 | 47,321 | 47,342 | 89.8 | 87.9 | 5,313 | 6,131 | —2,811 | —583 |
| Denver & Rio Grande Western | Sept. | 2,128 | 5,859 | 237 | 6,308 | 6,118 | 535 | 596 | 98 | 950 | 927 | 328 | 237 | 2,055 | 4,139 | 4,026 | 65.6 | 65.8 | 2,170 | 1,174 | 886 | 890 |
| | 9 mos. | 2,128 | 53,099 | 2,373 | 57,354 | 56,447 | 6,468 | 6,717 | 875 | 8,746 | 8,478 | 2,944 | 2,134 | 18,534 | 38,717 | 38,463 | 67.5 | 68.1 | 18,637 | 10,657 | 7,757 | 8,134 |
| Detroit & Toledo Shore Line | Sept. | 50 | 385 | .... | 437 | 557 | 52 | 55 | 4 | 68 | 67 | 24 | 20 | 181 | 336 | 375 | 77.0 | 67.3 | 101 | 37 | 13 | 41 |
| | 9 mos. | 50 | 4,809 | .... | 5,202 | 5,903 | 506 | 553 | 35 | 657 | 746 | 217 | 182 | 2,018 | 3,817 | 3,734 | 67.6 | 63.3 | 1,685 | 593 | 255 | 450 |
| Detroit, Toledo & Ironton | Sept. | 465 | 1,441 | .... | 1,547 | 1,483 | 218 | 227 | 27 | 401 | 464 | 153 | 55 | 499 | 1,267 | 1,296 | 81.9 | 87.4 | 280 | 124 | 163 | 52 |
| | 9 mos. | 465 | 14,632 | .... | 15,464 | 16,379 | 2,112 | 2,265 | 254 | 3,843 | 3,683 | 1,362 | 521 | 4,496 | 11,838 | 11,797 | 76.6 | 72.0 | 3,626 | 1,096 | 2,521 | 3,224 |
| Duluth, Miss. & Iron Range | Sept. | 575 | 4,785 | 4 | 5,615 | 375 | 678 | 406 | 178 | 685 | 503 | 218 | 13 | 1,591 | 3,304 | 1,726 | 58.8 | 60.8 | 2,311 | 1,338 | 898 | —742 |
| | 9 mos. | 575 | 34,537 | 12 | 40,433 | 25,291 | 4,845 | 4,439 | 686 | 6,069 | 5,191 | 1,884 | 123 | 11,877 | 25,533 | 20,969 | 63.2 | 82.9 | 14,900 | 9,049 | 5,722 | 1,012 |
| Duluth, So. Shore & Atlantic | Sept. | 544 | 574 | 3 | 610 | 574 | 107 | 112 | 15 | 109 | 115 | 26 | 34 | 203 | 479 | 491 | 78.5 | 85.5 | 131 | r 82 | r 71 | 16 |
| | 9 mos. | 544 | 5,092 | 22 | 5,326 | 5,339 | 978 | 1,054 | 115 | 987 | 1,011 | 235 | 298 | 1,881 | 4,364 | 4,452 | 81.9 | 83.4 | 962 | 394 | 452 | 445 |

# REVENUES AND EXPENSES OF RAILWAYS

*(Dollar figures are stated in thousands: i.e., with last three digits omitted)*

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1960

| Name of Road | | Average mileage operated during period | Operating Revenues: Freight | Passs. | Total (inc. misc.) 1960 | Total (inc. misc.) 1959 | Operating Expenses: Maint. Way and Structures: Total 1960 | Total 1959 | Deprec and Retirements | Maint. Equipment: Total 1960 | Total 1959 | Deprec and Retirements | Traffic | Transportation | Total 1960 | Total 1959 | Operating ratio 1960 | Operating ratio 1959 | Net from railway operation | Railway tax accruals | Net Railway operating income 1960 | Net Railway operating income 1959 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Duluth, Winnipeg & Pacific | Sept. | 175 | 454 | 1 | 457 | 3490 | 98 | 5198 | 5 | 68 | 68 | 1 | 7 | 185 | 368 | 463 | 80.5 | 94.5 | 89 | 44 | —33 | —186 |
| | 9 mos. | 175 | 4,158 | 6 | 4,195 | 4,427 | 1,042 | 1,087 | 49 | 506 | 544 | 10 | 65 | 1,641 | 3,346 | 3,439 | 79.8 | 77.7 | 849 | 388 | —257 | —153 |
| Elgin, Joliet & Eastern | Sept. | 205 | 2,686 | .... | 3,491 | 1,169 | 348 | 190 | 31 | 935 | 359 | 126 | 46 | 1,377 | 3,003 | 1,603 | 86.0 | 137.1 | 488 | 409 | 41 | —291 |
| | 9 mos. | 205 | 29,153 | .... | 38,733 | 35,191 | 3,230 | 2,598 | 258 | 8,206 | 6,379 | 1,122 | 413 | 15,059 | 30,165 | 26,245 | 77.9 | 74.6 | 8,568 | 4,931 | 1,482 | 2,945 |
| Erie | Sept. | 2,239 | 10,981 | 543 | 12,822 | 11,512 | 1,508 | 1,376 | 231 | 2,206 | 2,186 | 553 | 354 | 6,228 | 11,234 | 10,476 | 87.6 | 91.0 | 1,587 | 1,193 | —637 | —1,005 |
| | 9 mos. | 2,239 | 99,617 | 5,154 | 114,962 | 115,756 | 13,186 | 13,259 | 2,068 | 19,782 | 19,317 | 4,977 | 3,290 | 55,623 | 98,883 | 98,909 | 86.0 | 85.5 | 16,079 | 11,011 | —2,624 | —648 |
| Florida East Coast | Sept. | 572 | 1,365 | 169 | 1,719 | 2,132 | 187 | 323 | 9 | 447 | 417 | 115 | 72 | 794 | 1,656 | 1,928 | 96.4 | 90.4 | 62 | 178 | —284 | —188 |
| | 9 mos. | 572 | 17,155 | 3,816 | 23,253 | 24,930 | 2,920 | 3,648 | 385 | 4,326 | 4,840 | 1,047 | 728 | 9,148 | 18,757 | 20,742 | 80.7 | 83.2 | 4,496 | 1,865 | 692 | 317 |
| Georgia Railroad | Sept. | 321 | 531 | 12 | 628 | 644 | 84 | 89 | 9 | 107 | 124 | 34 | 41 | 289 | 566 | 594 | 90.2 | 92.4 | 62 | 39 | 17 | 19 |
| | 9 mos. | 321 | 4,762 | 150 | 5,678 | 6,068 | 737 | 845 | 76 | 1,004 | 1,113 | 300 | 358 | 2,617 | 5,068 | 5,484 | 89.3 | 90.4 | 610 | 371 | 325 | 352 |
| Georgia & Florida | Sept. | 321 | 251 | .... | 257 | 241 | 94 | 76 | 3 | 39 | 38 | 10 | 22 | 83 | 258 | 244 | 110.4 | 101.4 | —1 | 20 | —37 | —40 |
| | 9 mos. | 321 | 2,437 | .... | 2,491 | 2,598 | 1,002 | 678 | 32 | 367 | 368 | 90 | 201 | 790 | 2,537 | 2,353 | 101.8 | 87.2 | —46 | 188 | —396 | —62 |
| Grand Trunk Western | Sept. | 951 | 2,051 | 181 | 2,423 | 4,259 | 627 | 764 | 63 | 621 | 951 | 105 | 89 | 1,619 | 3,198 | 4,243 | 132.0 | 99.6 | —775 | 371 | —1,590 | —1,195 |
| | 9 mos. | 951 | 34,054 | 1,980 | 39,658 | 44,492 | 6,290 | 6,346 | 570 | 7,349 | 8,238 | 996 | 837 | 19,492 | 36,179 | 39,558 | 91.2 | 88.9 | 3,479 | 3,615 | —4,373 | —4,263 |
| Great Northern | Sept. | 8,280 | 23,574 | 641 | 25,881 | 22,568 | 3,865 | 3,435 | 307 | 3,985 | 3,888 | 916 | 583 | 7,777 | 17,189 | 16,183 | 66.4 | 71.7 | 8,692 | 4,117 | 3,603 | 3,103 |
| | 9 mos. | 8,295 | 165,940 | 7,130 | 186,880 | 190,683 | 30,490 | 31,285 | 2,948 | 35,193 | 35,869 | 7,944 | 5,126 | 67,995 | 147,795 | 149,334 | 79.1 | 78.3 | 39,085 | 22,546 | 13,004 | 15,532 |
| Green Bay & Western | Sept. | 219 | 383 | .... | 396 | 386 | 85 | 80 | 6 | 54 | 48 | 8 | 27 | 118 | 306 | 297 | 77.2 | 76.9 | 90 | 31 | 14 | .. |
| | 9 mos. | 219 | 3,168 | .... | 3,289 | 3,568 | 540 | 589 | 44 | 426 | 424 | 77 | 250 | 1,077 | 2,515 | 2,685 | 76.5 | 73.0 | 774 | 365 | 81 | 213 |
| Gulf, Mobile & Ohio | Sept. | 2,747 | 5,226 | 203 | 5,963 | 6,664 | 813 | 936 | 79 | 1,330 | 1,357 | 294 | 265 | 2,176 | 4,896 | 5,263 | 87.1 | 79.0 | 1,067 | 545 | 159 | 320 |
| | 9 mos. | 2,747 | 51,083 | 2,109 | 57,197 | 61,276 | 7,717 | 8,228 | 692 | 11,909 | 12,211 | 2,645 | 2,541 | 20,518 | 45,724 | 47,291 | 79.9 | 77.2 | 11,473 | 5,049 | 2,788 | 3,894 |
| Illinois Central | Sept. | 6,500 | 16,960 | 1,800 | 21,043 | 22,284 | 2,955 | 3,015 | 373 | 4,091 | 3,889 | 889 | 660 | 8,552 | 17,326 | 16,930 | 82.3 | 76.0 | 3,717 | 1,886 | 1,208 | 1,435 |
| | 9 mos. | 6,500 | 156,120 | 16,919 | 193,640 | 200,460 | 8,669 | 29,232 | 3,417 | 37,456 | 37,324 | 7,783 | 5,845 | 77,151 | 158,959 | 159,951 | 82.1 | 79.8 | 34,682 | 19,383 | 8,795 | 13,134 |
| Illinois Terminal | Sept. | 335 | 735 | .... | 813 | 889 | 71 | 102 | 3 | 119 | 162 | 26 | 45 | 332 | 625 | 708 | 76.9 | 79.6 | 188 | 65 | 17 | 17 |
| | 9 mos. | 335 | 6,331 | .... | 7,094 | 8,049 | 699 | 954 | 28 | 1,255 | 1,686 | 240 | 417 | 2,922 | 5,798 | 6,808 | 81.7 | 84.6 | 1,297 | 349 | 66 | —21 |
| Kansas City Southern | Sept. | 891 | 3,005 | 62 | 3,411 | 3,666 | 239 | 234 | 48 | 479 | 558 | 113 | 97 | 1,186 | 2,216 | 2,142 | 62.3 | 58.4 | 1,286 | 479 | 525 | 641 |
| | 9 mos. | 891 | 28,998 | 673 | 32,824 | 34,256 | 2,420 | 2,647 | 438 | 4,580 | 4,664 | 1,018 | 868 | 10,678 | 19,717 | 19,868 | 60.1 | 58.0 | 13,106 | 5,360 | 5,424 | 6,025 |
| Kansas, Oklahoma & Gulf | Sept. | 328 | 429 | .... | 430 | 374 | 37 | 51 | 8 | 34 | 30 | 12 | 33 | 97 | 236 | 235 | 55.0 | 63.0 | 174 | 32 | 116 | 56 |
| | 9 mos. | 327 | 3,840 | .... | 3,882 | 4,128 | 334 | 563 | 68 | 337 | 309 | 111 | 299 | 986 | 2,227 | 2,298 | 57.4 | 55.7 | 1,655 | 652 | 615 | 654 |
| Lake Superior & Ishpeming | Sept. | 160 | 390 | .... | 498 | 73 | 63 | 58 | 12 | 78 | 45 | 36 | 3 | 121 | 283 | 168 | 56.8 | 230.1 | 215 | 131 | 92 | —52 |
| | 9 mos. | 160 | 3,298 | .... | 4,260 | 3,020 | 559 | 760 | 108 | 702 | 573 | 320 | 20 | 1,051 | 2,502 | 2,383 | 58.7 | 78.9 | 1,758 | 1,085 | 773 | 316 |
| Lehigh & Hudson River | Sept. | 96 | 290 | .... | 292 | 256 | 29 | 19 | 2 | 30 | 24 | 8 | 16 | 108 | 201 | 197 | 69.2 | 76.8 | 90 | 31 | 19 | 2 |
| | 9 mos. | 96 | 2,372 | .... | 2,386 | 2,503 | 238 | 267 | 22 | 274 | 262 | 75 | 146 | 953 | 1,778 | 1,833 | 74.5 | 73.2 | 608 | 211 | 63 | 80 |
| Lehigh & New England | Sept. | 177 | 242 | .... | 245 | 534 | 39 | 69 | 7 | 197 | 187 | 37 | 8 | 150 | 447 | 526 | 182.1 | 98.5 | —201 | 25 | —158 | 70 |
| | 9 mos. | 177 | 2,871 | .... | 2,904 | 4,528 | 397 | 564 | 68 | 1,654 | 1,496 | 340 | 112 | 1,455 | 4,077 | 4,555 | 140.4 | 100.6 | —1,173 | 249 | —697 | 772 |
| Lehigh Valley | Sept. | 1,127 | 3,932 | 71 | 4,175 | 4,256 | 509 | 450 | 97 | 705 | 630 | 212 | 129 | 2,223 | 3,787 | 3,659 | 98.7 | 86.0 | 388 | 448 | —273 | —29 |
| | 9 mos. | 1,127 | 36,316 | 1,015 | 39,029 | 40,953 | 5,265 | 4,825 | 873 | 6,878 | 7,021 | 1,612 | 1,219 | 20,368 | 35,771 | 36,962 | 91.7 | 90.3 | 3,258 | 4,188 | —2,852 | —1,537 |
| Long Island | Sept. | 344 | 872 | 4,193 | 5,264 | 5,866 | 785 | 818 | 104 | 1,061 | 1,117 | 169 | 48 | 2,922 | 5,035 | 5,059 | 95.6 | 86.3 | 229 | 414 | —406 | 131 |
| | 9 mos. | 344 | 8,042 | 37,201 | 47,062 | 51,816 | 7,118 | 7,282 | 937 | 9,286 | 9,944 | 1,521 | 401 | 24,707 | 43,479 | 45,723 | 92.4 | 88.2 | 3,583 | 3,598 | —1,901 | 683 |
| Louisiana & Arkansas | Sept. | 746 | 1,762 | 38 | 1,899 | 2,196 | 120 | 180 | 20 | 267 | 213 | 98 | 79 | 646 | 1,188 | 1,307 | 62.6 | 62.1 | 711 | 383 | 221 | 284 |
| | 9 mos. | 746 | 17,031 | 372 | 18,456 | 19,027 | 1,746 | 1,762 | 207 | 2,745 | 2,714 | 880 | 710 | 6,098 | 12,011 | 12,004 | 65.1 | 63.1 | 6,445 | 3,274 | 2,138 | 2,493 |
| Louisville & Nashville | Sept. | 5,684 | 16,190 | 599 | 18,093 | 18,471 | 2,900 | 2,000 | 376 | 3,500 | 3,208 | 1,169 | 525 | 7,419 | 15,456 | 13,693 | 85.4 | 74.1 | 2,637 | 2,381 | 1,220 | 1,731 |
| | 9 mos. | 5,684 | 150,487 | 6,562 | 169,536 | 170,697 | 20,800 | 23,365 | 2,892 | 36,640 | 34,595 | 10,427 | 4,587 | 68,219 | 139,029 | 137,975 | 82.8 | 80.8 | 30,507 | 21,462 | 11,958 | 13,203 |
| Maine Central | Sept. | 936 | 1,706 | 5 | 1,848 | 1,996 | 380 | 392 | 28 | 368 | 369 | 82 | 29 | 713 | 1,607 | 1,641 | 86.9 | 82.2 | 242 | 64 | 122 | 148 |
| | 9 mos. | 936 | 17,084 | 205 | 18,443 | 18,630 | 3,192 | 3,331 | 258 | 3,356 | 3,387 | 743 | 281 | 6,642 | 14,474 | 15,124 | 78.5 | 81.2 | 3,970 | 1,738 | 1,495 | 1,287 |
| Minneapolis & St. Louis | Sept. | 1,391 | 1,784 | .... | 1,834 | 1,803 | 234 | 270 | 38 | 225 | 259 | 64 | 109 | 623 | 1,333 | 1,414 | 72.7 | 78.4 | 501 | 264 | 134 | 140 |
| | 9 mos. | 1,391 | 14,950 | 3 | 15,357 | 16,467 | 2,214 | 2,586 | 272 | 2,457 | 2,864 | 869 | 1,065 | 5,625 | 12,621 | 13,662 | 82.2 | 83.0 | 2,735 | 1,574 | 657 | 1,107 |
| Minn., Northfield & Southern | Sept. | 77 | 287 | .... | 307 | 332 | 31 | 25 | 3 | 32 | 39 | 13 | 36 | 89 | 225 | 215 | 73.3 | 64.7 | 82 | 50 | 22 | 43 |
| | 9 mos. | 77 | 2,672 | .... | 2,832 | 3,313 | 238 | 213 | 23 | 361 | 362 | 116 | 316 | 782 | 2,034 | 2,045 | 71.8 | 61.7 | 798 | 506 | 250 | 471 |
| Minn., St. Paul & S. Ste. Marie | Sept. | 3,222 | 4,879 | 22 | 5,095 | 4,389 | 658 | 1,045 | 51 | 634 | 546 | 142 | 110 | 1,457 | 3,108 | 3,320 | 61.0 | 75.6 | 1,987 | 636 | 1,155 | 731 |
| | 9 mos. | 3,222 | 28,749 | 485 | 30,723 | 32,513 | 5,066 | 6,522 | 442 | 5,526 | 6,186 | 1,291 | 993 | 12,385 | 25,963 | 28,465 | 84.9 | 87.5 | 4,789 | 2,550 | 1,509 | 877 |
| Missouri Illinois | Sept. | 172 | 474 | .... | 479 | 40 | 4 | 46 | 4 | 80 | 74 | 40 | 13 | 128 | 276 | 278 | 57.6 | 56.9 | 203 | 158 | 93 | 112 |
| | 9 mos. | 172 | 4,021 | .... | 4,048 | 4,134 | 363 | 400 | 48 | 813 | 793 | 360 | 127 | 1,187 | 2,603 | 2,590 | 64.3 | 62.7 | 1,445 | 1,217 | 648 | 829 |
| M.-K.-T. Lines | Sept. | 2,917 | 4,452 | 74 | 4,960 | 4,480 | 579 | 372 | 88 | 860 | 946 | 263 | 163 | 1,892 | 3,703 | 3,311 | 74.7 | 73.9 | 1,257 | 344 | 373 | 295 |
| | 9 mos. | 2,917 | 39,623 | 693 | 43,761 | 44,837 | 4,840 | 4,891 | 784 | 8,692 | 9,388 | 2,361 | 1,576 | 16,072 | 33,020 | 33,473 | 75.8 | 74.7 | 10,740 | 3,148 | 2,922 | 3,113 |
| Missouri Pacific | Sept. | 9,406 | 19,747 | 818 | 23,130 | 24,393 | 3,266 | 3,583 | 334 | 4,201 | 4,292 | 1,161 | 690 | 9,300 | 18,682 | 19,062 | 80.8 | 78.1 | 4,448 | 1,386 | 1,972 | 2,353 |
| | 9 mos. | 9,411 | 193,979 | 8,730 | 224,377 | 228,792 | 30,873 | 31,284 | 2,917 | 39,159 | 39,360 | 9,488 | 6,516 | 86,255 | 172,277 | 173,820 | 76.8 | 76.0 | 52,100 | 17,250 | 23,853 | 24,396 |
| Monon | Sept. | 541 | 1,384 | 23 | 1,504 | 1,653 | 285 | 270 | 20 | 280 | 310 | 76 | 98 | 619 | 1,379 | 1,422 | 91.7 | 86.0 | 125 | 124 | —100 | 71 |
| | 9 mos. | 541 | 12,786 | 245 | 13,865 | 14,961 | 2,171 | 2,186 | 195 | 2,501 | 2,708 | 685 | 928 | 5,761 | 12,278 | 12,763 | 88.5 | 85.3 | 1,588 | 1,062 | —311 | 779 |
| Monongahela | Sept. | 177 | 576 | .... | 579 | 414 | 79 | 70 | 11 | 47 | 50 | 11 | 2 | 116 | 254 | 275 | 43.9 | 66.8 | 325 | 118 | 160 | 76 |
| | 9 mos. | 177 | 5,212 | .... | 5,235 | 3,834 | 661 | 607 | 109 | 467 | 497 | 98 | 10 | 1,189 | 2,488 | 2,786 | 47.5 | 72.7 | 2,747 | 383 | 1,870 | 421 |
| New York Central | Sept. | 10,368 | 42,186 | 5,267 | 56,047 | 51,362 | 6,474 | 5,097 | 1,143 | 11,250 | 11,100 | 2,420 | 1,021 | 26,070 | 47,659 | 45,190 | 85.0 | 88.0 | 8,388 | 5,745 | —553 | —1,251 |
| | 9 mos. | 10,368 | 387,617 | 51,135 | 513,122 | 515,545 | 56,020 | 55,080 | 9,787 | 101,250 | 97,900 | 21,966 | 9,490 | 239,432 | 432,512 | 433,067 | 84.3 | 84.0 | 80,610 | 51,369 | 9,886 | 16,302 |
| Pittsburgh & Lake Erie | Sept. | 220 | 2,616 | 28 | 2,727 | 935 | 363 | 302 | 55 | 1,002 | 692 | 332 | 63 | 1,003 | 2,647 | 1,915 | 97.1 | 204.7 | 30 | 403 | 680 | 173 |
| | 9 mos. | 220 | 25,682 | 304 | 27,154 | 24,100 | 3,726 | 3,322 | 500 | 8,262 | 7,717 | 2,993 | 568 | 9,834 | 24,282 | 23,022 | 89.4 | 95.5 | 2,872 | 4,966 | 7,698 | 6,214 |
| New York, Chic. & St. L. | Sept. | 2,170 | 12,303 | 113 | 12,989 | 10,830 | 1,318 | 1,205 | 127 | 1,878 | 1,830 | 469 | 355 | 4,859 | 8,936 | 8,159 | 68.8 | 75.3 | 4,053 | 1,698 | 1,464 | 1,114 |
| | 9 mos. | 2,170 | 108,720 | 1,140 | 114,286 | 112,204 | 12,240 | 12,439 | 1,416 | 18,372 | 18,608 | 4,236 | 3,248 | 43,974 | 82,308 | 81,199 | 72.0 | 72.3 | 31,978 | 15,029 | 11,231 | 12,449 |
| New York, New Haven & Hartford | Sept. | 1,742 | 5,424 | 3,423 | 10,311 | 11,049 | 1,496 | 1,558 | 254 | 1,905 | 1,796 | 478 | 227 | 5,526 | 9,996 | 10,157 | 96.9 | 91.9 | 315 | 1,032 | —2,131 | —1,411 |
| | 9 mos. | 1,755 | 54,181 | 32,991 | 101,932 | 108,750 | 12,742 | 13,304 | 2,368 | 17,173 | 16,230 | 4,228 | 2,171 | 50,947 | 91,069 | 93,166 | 90.1 | 85.7 | 9,963 | 9,179 | —12,536 | —69 |
| New York Connecting | Sept. | 21 | 123 | .... | 141 | 742 | 49 | 106 | 25 | 8 | 12 | .... | .... | 34 | 96 | 204 | 68.2 | 84.2 | 45 | 162 | —76 | —6030 |
| | 9 mos. | 21 | 2,119 | .... | 2,398 | 2,936 | 644 | 609 | 228 | 152 | 123 | .... | .... | 757 | 1,587 | 1,558 | 66.2 | 83.1 | 819 | 847 | —265 | 376 |
| New York, Sus. & Western | Sept. | 99 | 295 | 7 | 316 | 328 | 36 | 43 | 8 | 43 | 51 | 9 | 10 | 116 | 268 | 294 | 84.8 | 95.2 | 48 | 33 | —29 | —41 |
| | 9 mos. | 100 | 2,756 | 117 | 3,020 | 2,995 | 370 | 374 | 60 | 450 | 480 | 94 | 82 | 1,372 | 2,566 | 2,739 | 85.0 | 91.5 | 454 | 302 | —225 | —381 |

(Continued on next page)

a RAILWAY AGE Service Page

# REVENUES AND EXPENSES OF RAILWAYS

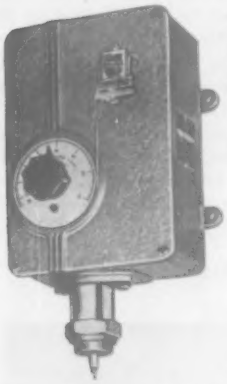
*(Dollar figures are stated in thousands: i.e., with last three digits omitted)*

MONTH OF SEPTEMBER AND NINE MONTHS OF CALENDAR YEAR 1960

| Name of Road | | Average mileage operated during period | Operating Revenues: Freight | Pass. | Total (Inc. misc.) 1960 | 1959 | Operating Expenses: Maint. Way and Structures: Total 1960 | Total 1959 | Deprec and Retirements | Maint. Equipment: Total 1960 | Total 1959 | Deprec. and Retirements | Traffic | Transportation | Total 1960 | Total 1959 | Operating ratio 1960 | Operating ratio 1959 | Net from railway operation | Railway tax accruals | Net Railway operating income 1960 | Net Railway operating income 1959 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Norfolk & Western | Sept. | 2,743 | 18,720 | 166 | 19,719 | 18,962 | 2,448 | 1,869 | 391 | 3,222 | 3,100 | 1,444 | 425 | 5,054 | 12,207 | 11,508 | 61.9 | 60.7 | 7,512 | 3,142 | 5,958 | 5,733 |
| | 9 mos. | 2,743 | 175,250 | 1,869 | 184,937 | 185,468 | 20,246 | 20,442 | 3,488 | 29,965 | 32,383 | 13,089 | 3,690 | 49,225 | 119,319 | 113,685 | 59.7 | 61.3 | 74,618 | 38,084 | 49,112 | 47,058 |
| Norfolk Southern | Sept. | 592 | 788 | .... | 806 | 938 | 180 | 181 | 14 | 133 | 136 | 40 | 52 | 302 | 735 | 856 | 91.3 | 78.9 | 70 | 20 | —15 | 82 |
| | 9 mos. | 592 | 6,858 | .... | 6,972 | 7,342 | 1,539 | 1,697 | 128 | 1,191 | 1,186 | 361 | 447 | 2,343 | 6,115 | 6,323 | 87.7 | 86.1 | 856 | 491 | 227 | 251 |
| Northern Pacific | Sept. | 6,806 | 14,784 | 430 | 16,251 | 17,268 | 2,981 | 2,607 | 419 | 2,844 | 2,599 | 835 | 399 | 6,144 | 13,404 | 12,531 | 82.5 | 72.6 | 2,847 | 1,734 | 1,285 | 1,829 |
| | 9 mos. | 6,821 | 118,770 | 4,699 | 133,088 | 139,328 | 22,058 | 21,763 | 2,998 | 25,334 | 24,418 | 7,339 | 3,795 | 53,883 | 113,447 | 112,106 | 85.2 | 80.5 | 19,641 | 14,945 | 6,795 | 10,781 |
| Northwestern Pacific | Sept. | 328 | 1,028 | .... | 1,036 | 1,256 | 187 | 218 | 24 | 82 | 83 | 3 | 7 | 308 | 611 | 674 | 59.0 | 53.7 | 425 | 147 | 43 | 132 |
| | 9 mos. | 328 | 9,004 | 8 | 9,063 | 10,700 | 1,763 | 1,915 | 174 | 692 | 758 | 24 | 69 | 2,759 | 5,521 | 6,051 | 60.9 | 56.6 | 3,542 | 1,084 | 362 | 1,043 |
| Pacific Electric | Sept. | 345 | 1,022 | .... | 1,180 | 1,066 | 163 | 190 | 23 | 40 | 43 | 4 | 23 | 602 | 930 | 933 | 78.8 | 87.5 | 251 | 137 | —65 | —171 |
| | 9 mos. | 351 | 9,003 | .... | 10,247 | 10,632 | 1,625 | 1,671 | 211 | 354 | 496 | 33 | 199 | 4,817 | 7,913 | 8,431 | 77.2 | 79.3 | 2,334 | 1,273 | —489 | —221 |
| Pennsylvania | Sept. | 9,873 | 28,599 | 4,011 | 38,704 | 65,366 | 5,571 | 6,342 | 1,477 | 9,721 | 12,984 | 3,023 | 909 | 6,144 | 13,404 | 12,531 | 82.5 | 72.6 | 2,847 | 1,734 | 1,285 | 1,829 |
| | 9 mos. | 9,885 | 488,540 | 74,268 | 640,326 | 666,049 | 66,478 | 65,606 | 13,263 | 123,504 | 133,785 | 26,643 | 10,738 | 292,731 | 531,054 | 550,967 | 82.9 | 82.7 | 109,292 | 53,525 | 1,855 | 19,572 |
| Penn.-Reading S. S. Lines | Sept. | 338 | 400 | 57 | 479 | 699 | 163 | 158 | 27 | 97 | 128 | 26 | 9 | 450 | 789 | 830 | 164.8 | 118.7 | —310 | 71 | —552 | —350 |
| | 9 mos. | 338 | 4,743 | 771 | 5,714 | 6,131 | 1,582 | 2,013 | 231 | 1,085 | 1,180 | 232 | 67 | 4,329 | 7,571 | 8,164 | 132.5 | 133.2 | —1,857 | 666 | —4,075 | —4,125 |
| Piedmont & Northern | Sept. | 126 | 430 | .... | 442 | 429 | 44 | 48 | 4 | 35 | 32 | 10 | 35 | 92 | 247 | 249 | 55.9 | 58.0 | 195 | 88 | 56 | 37 |
| | 9 mos. | 126 | 4,153 | .... | 4,255 | 4,177 | 419 | 386 | 47 | 336 | 308 | 89 | 294 | 843 | 2,250 | 2,102 | 52.9 | 50.3 | 2,005 | 970 | 553 | 574 |
| Pittsburgh & West Virginia | Sept. | 132 | 546 | .... | 550 | 351 | 149 | 128 | 26 | 137 | 138 | 45 | 65 | 201 | 626 | 532 | 113.7 | 151.4 | —75 | Cr.49 | —31 | —42 |
| | 9 mos. | 132 | 6,157 | .... | 6,213 | 6,032 | 1,334 | 1,284 | 233 | 1,334 | 1,422 | 404 | 648 | 1,855 | 5,706 | 5,835 | 91.8 | 96.7 | 507 | 91 | 358 | 279 |
| Reading | Sept. | 1,303 | 8,791 | 529 | 10,010 | 7,837 | 1,119 | 1,117 | 195 | 1,788 | 1,572 | 472 | 202 | 4,221 | 7,865 | 7,141 | 78.6 | 91.1 | 2,145 | 775 | 798 | 371 |
| | 9 mos. | 1,303 | 70,886 | 4,339 | 80,746 | 79,572 | 9,784 | 10,164 | 1,738 | 15,457 | 15,489 | 4,329 | 1,737 | 35,650 | 66,961 | 67,484 | 82.9 | 84.8 | 13,785 | 5,371 | 5,115 | 5,468 |
| Richmond, Fred. & Potomac | Sept. | 118 | 1,052 | 206 | 1,553 | 1,721 | 140 | 149 | 33 | 305 | 299 | 66 | 27 | 629 | 1,238 | 1,237 | 79.2 | 71.9 | 323 | 216 | 4 | 202 |
| | 9 mos. | 118 | 11,352 | 3,837 | 18,181 | 17,915 | 1,501 | 1,347 | 268 | 2,667 | 2,688 | 581 | 253 | 6,136 | 11,863 | 11,959 | 65.3 | 66.8 | 6,318 | 3,751 | 1,686 | 1,792 |
| Rutland | Sept. | 391 | 171 | .... | 181 | 367 | 48 | 74 | 8 | 39 | 52 | 18 | 23 | 95 | 227 | 333 | 125.3 | 90.8 | —46 | 26 | —74 | .... |
| | 9 mos. | 391 | 2,788 | .... | 3,005 | 3,454 | 655 | 695 | 80 | 515 | 530 | 164 | 247 | 1,318 | 2,979 | 3,157 | 99.1 | 91.4 | 26 | 275 | —271 | —9 |
| St. Louis-San Francisco | Sept. | 4,546 | 8,513 | 172 | 9,485 | 9,477 | 1,486 | 1,369 | 170 | 1,453 | 1,775 | 608 | 357 | 3,773 | 7,689 | 8,075 | 81.1 | 85.2 | 1,796 | 751 | 777 | 673 |
| | 9 mos. | 4,550 | 80,057 | 1,683 | 88,883 | 89,852 | 13,763 | 13,916 | 1,642 | 14,564 | 15,457 | 5,386 | 3,218 | 35,535 | 72,605 | 73,283 | 81.7 | 81.6 | 16,278 | 6,399 | 7,866 | 8,394 |
| St. Louis-S. F. & Texas | Sept. | 143 | 370 | .... | 384 | 347 | 27 | 29 | 4 | 22 | 25 | 1 | 22 | 132 | 229 | 233 | 57.3 | 67.0 | 164 | 83 | 24 | 18 |
| | 9 mos. | 143 | 3,737 | 2 | 3,886 | 3,876 | 283 | 241 | 37 | 234 | 247 | 11 | 200 | 1,318 | 2,155 | 2,173 | 55.5 | 56.1 | 1,731 | 583 | 604 | 496 |
| St. Louis Southwestern Lines | Sept. | 1,554 | 4,614 | .... | 4,686 | 5,261 | 570 | 595 | 90 | 685 | 712 | 225 | 188 | 1,722 | 3,378 | 3,453 | 72.1 | 65.6 | 1,308 | 527 | 651 | 811 |
| | 9 mos. | 1,554 | 48,219 | 1 | 48,828 | 49,352 | 5,190 | 5,352 | 751 | 6,278 | 6,011 | 1,948 | 1,647 | 15,953 | 30,744 | 31,963 | 63.0 | 62.9 | 10,884 | 8,046 | 8,224 | 7,876 |
| Savannah & Atlanta | Sept. | 144 | 338 | .... | 354 | 360 | 77 | 44 | 2 | 66 | 64 | 19 | 16 | 114 | 287 | 270 | 81.3 | 75.8 | 66 | 25 | 25 | 38 |
| | 9 mos. | 144 | 3,167 | .... | 3,301 | 3,088 | 517 | 463 | 16 | 615 | 574 | 174 | 150 | 1,057 | 2,456 | 2,338 | 74.4 | 75.7 | 846 | 356 | 338 | 363 |
| Seaboard Air Line | Sept. | 4,145 | 9,713 | 696 | 11,372 | 12,514 | 1,505 | 1,496 | 206 | 2,493 | 2,278 | 757 | 456 | 4,573 | 9,654 | 9,507 | 84.9 | 76.8 | 1,719 | 764 | 776 | 1,577 |
| | 9 mos. | 4,146 | 98,736 | 11,040 | 119,235 | 119,913 | 15,389 | 15,166 | 1,984 | 23,014 | 21,859 | 6,660 | 4,274 | 44,132 | 93,051 | 90,777 | 79.0 | 75.7 | 26,184 | 11,499 | 12,089 | 14,442 |
| Southern Railway | Sept. | 6,267 | 19,192 | 599 | 21,506 | 25,289 | 2,476 | 2,634 | 373 | 3,665 | 3,738 | 1,030 | 530 | 6,895 | 14,885 | 15,345 | 69.2 | 65.9 | 6,621 | 2,702 | 3,230 | 3,552 |
| | 9 mos. | 6,267 | 171,534 | 8,391 | 194,796 | 202,214 | 24,206 | 25,674 | 3,118 | 34,290 | 34,108 | 9,140 | 4,630 | 63,901 | 137,828 | 139,432 | 70.8 | 69.0 | 56,968 | 24,852 | 25,943 | 28,820 |
| Alabama Great Southern | Sept. | 328 | 997 | 36 | 1,188 | 1,310 | 188 | 182 | 36 | 266 | 296 | 83 | 43 | 476 | 1,087 | 1,094 | 91.5 | 83.5 | 101 | 119 | —30 | 71 |
| | 9 mos. | 328 | 10,017 | 396 | 11,696 | 12,509 | 2,246 | 2,128 | 331 | 2,733 | 2,898 | 737 | 377 | 4,448 | 10,726 | 10,753 | 91.7 | 86.0 | 970 | 818 | —372 | 557 |
| Cinn., N. O. & Tex. Pac | Sept. | 337 | 2,473 | 72 | 2,761 | 3,038 | 552 | 529 | 121 | 677 | 675 | 265 | 87 | 868 | 2,391 | 2,373 | 86.6 | 78.1 | 369 | 226 | 353 | 487 |
| | 9 mos. | 337 | 24,790 | 802 | 27,541 | 30,116 | 5,103 | 5,141 | 685 | 6,604 | 6,391 | 2,226 | 757 | 7,996 | 22,137 | 21,983 | 80.4 | 73.0 | 5,404 | 2,601 | 4,178 | 5,538 |
| Georgia Southern & Florida | Sept. | 397 | 614 | 24 | 716 | 806 | 126 | 96 | 10 | 59 | 88 | 10 | 23 | 258 | 530 | 541 | 74.0 | 67.1 | 186 | 47 | —3 | 43 |
| | 9 mos. | 397 | 5,534 | 324 | 6,581 | 7,682 | 1,426 | 1,082 | 101 | 651 | 805 | 93 | 202 | 2,356 | 5,140 | 5,078 | 78.1 | 68.1 | 1,440 | 396 | —340 | 515 |
| New Orleans & Northeastern | Sept. | 203 | 630 | 27 | 731 | 938 | 192 | 183 | 30 | 220 | 191 | 101 | 28 | 227 | 749 | 723 | 102.5 | 77.1 | —18 | 93 | —76 | 102 |
| | 9 mos. | 203 | 6,616 | 297 | 7,549 | 8,687 | 1,782 | 1,771 | 234 | 1,934 | 1,802 | 832 | 247 | 2,267 | 6,899 | 6,816 | 91.4 | 78.5 | 650 | 782 | 262 | 913 |
| Southern Pacific | Sept. | 7,959 | 40,004 | 1,934 | 44,188 | 46,444 | 5,061 | 5,438 | 585 | 9,788 | 10,455 | 2,592 | 802 | 17,589 | 35,468 | 36,159 | 80.3 | 77.9 | 8,720 | 4,928 | 3,157 | 4,198 |
| | 9 mos. | 8,011 | 367,936 | 20,172 | 410,205 | 418,124 | 47,003 | 48,282 | 5,695 | 91,597 | 91,116 | 23,175 | 6,907 | 155,666 | 320,301 | 323,508 | 78.1 | 77.4 | 89,984 | 46,431 | 37,821 | 37,887 |
| Texas & New Orleans | Sept. | 4,091 | 10,016 | 255 | 10,865 | 11,583 | 1,704 | 2,188 | 183 | 1,842 | 1,728 | 203 | 242 | 4,850 | 8,507 | 9,051 | 78.4 | 78.4 | 2,358 | 730 | 327 | 511 |
| | 9 mos. | 4,092 | 90,993 | 2,725 | 99,244 | 106,437 | 15,837 | 17,586 | 1,414 | 15,221 | 15,208 | 1,818 | 2,267 | 37,059 | 75,807 | 79,531 | 76.4 | 74.7 | 23,437 | 8,865 | 3,547 | 5,943 |
| Spokane International | Sept. | 150 | 317 | .... | 329 | 281 | 60 | 50 | 4 | 26 | 29 | 10 | 4 | 76 | 176 | 170 | 53.6 | 60.5 | 153 | 76 | 53 | 38 |
| | 9 mos. | 150 | 2,533 | .... | 2,613 | 2,701 | 487 | 413 | 32 | 243 | 236 | 89 | 38 | 647 | 1,502 | 1,469 | 57.5 | 54.4 | 1,111 | 547 | 310 | 483 |
| Spokane, Portland & Seattle | Sept. | 936 | 2,459 | 78 | 2,730 | 2,977 | 429 | 436 | 61 | 397 | 469 | 129 | 37 | 1,031 | 2,023 | 2,157 | 70.4 | 72.5 | 707 | 247 | 327 | 349 |
| | 9 mos. | 936 | 22,169 | 790 | 24,628 | 25,874 | 3,910 | 4,030 | 536 | 4,298 | 4,253 | 1,160 | 321 | 9,414 | 19,065 | 18,946 | 67.4 | 73.2 | 5,563 | 2,418 | 2,153 | 3,202 |
| Tennessee Central | Sept. | 284 | 316 | .... | 346 | 355 | 43 | 47 | 5 | 54 | 52 | 21 | 16 | 123 | 256 | 255 | 73.9 | 71.8 | 90 | 25 | 25 | 31 |
| | 9 mos. | 284 | 2,836 | 2 | 3,104 | 3,106 | 420 | 391 | 48 | 493 | 463 | 192 | 137 | 1,107 | 2,366 | 2,317 | 76.2 | 74.6 | 738 | 230 | 121 | 215 |
| Texas & Pacific | Sept. | 1,828 | 4,482 | 286 | 5,408 | 5,791 | 487 | 722 | 96 | 983 | 1,047 | 286 | 227 | 2,426 | 4,569 | 4,756 | 84.5 | 82.1 | 840 | 258 | 239 | 362 |
| | 9 mos. | 1,828 | 45,607 | 2,983 | 54,117 | 55,840 | 5,844 | 7,447 | 902 | 9,510 | 9,539 | 2,533 | 2,090 | 22,701 | 43,551 | 45,288 | 80.5 | 81.1 | 10,566 | 4,221 | 2,634 | 2,876 |
| Texas Mexican | Sept. | 161 | 213 | .... | 235 | 277 | 48 | 74 | 8 | 36 | 34 | 11 | 13 | 80 | 203 | 231 | 86.3 | 83.4 | 52 | 12 | —2 | —8 |
| | 9 mos. | 161 | 2,298 | .... | 2,545 | 2,799 | 418 | 546 | 56 | 310 | 302 | 103 | 113 | 755 | 1,810 | 1,996 | 71.1 | 71.3 | 736 | 335 | 141 | 136 |
| Toledo, Peoria & Western | Sept. | 239 | 5,264 | .... | 502 | 720 | 56 | 88 | 7 | 43 | 54 | 13 | 47 | 153 | 385 | 419 | 66.8 | 58.2 | 167 | 68 | 35 | 96 |
| | 9 mos. | 239 | 5,264 | .... | 5,484 | 5,873 | 649 | 707 | 62 | 445 | 458 | 121 | 459 | 1,545 | 3,462 | 3,541 | 63.1 | 60.3 | 2,022 | 877 | 528 | 701 |
| Union Pacific | Sept. | 9,746 | 36,567 | 2,072 | 41,600 | 43,339 | 3,861 | 5,014 | 527 | 6,740 | 7,379 | 2,509 | 1,066 | 14,603 | 28,747 | 30,860 | 69.1 | 71.2 | 12,854 | 7,023 | 3,588 | 3,581 |
| | 9 mos. | 9,746 | 318,972 | 21,525 | 367,416 | 385,429 | 40,115 | 46,717 | 5,889 | 68,080 | 72,637 | 21,727 | 10,667 | 130,919 | 270,303 | 286,671 | 73.6 | 74.4 | 97,113 | 57,971 | 22,291 | 26,585 |
| Wabash | Sept. | 2,413 | 8,663 | 389 | 10,117 | 9,674 | 895 | 1,070 | 125 | 1,339 | 1,299 | 494 | 311 | 4,567 | 7,548 | 7,720 | 74.6 | 79.8 | 2,569 | 673 | 1,033 | 463 |
| | 9 mos. | 2,413 | 72,526 | 3,659 | 84,726 | 90,082 | 8,346 | 10,773 | 1,057 | 12,142 | 12,967 | 4,239 | 2,956 | 39,391 | 66,960 | 72,703 | 79.0 | 80.7 | 17,766 | 6,195 | 4,321 | 4,357 |
| Ann Arbor | Sept. | 294 | 648 | .... | 666 | 693 | 60 | 87 | 7 | 152 | 163 | 44 | 22 | 315 | 570 | 656 | 85.6 | 94.7 | 96 | 51 | 38 | —134 |
| | 9 mos. | 294 | 6,099 | .... | 6,225 | 6,616 | 590 | 807 | 752 | 1,397 | 1,445 | 400 | 254 | 3,010 | 5,455 | 6,039 | 87.6 | 91.3 | 770 | 491 | 100 | —134 |
| Western Maryland | Sept. | 841 | 4,272 | .... | 4,406 | 2,338 | 581 | 494 | 65 | 794 | 747 | 301 | 120 | 1,398 | 3,147 | 2,609 | 71.4 | 111.6 | 1,259 | 623 | 838 | 112 |
| | 9 mos. | 842 | 34,756 | .... | 36,027 | 34,085 | 5,325 | 4,835 | 562 | 7,541 | 7,191 | 2,761 | 1,124 | 11,970 | 27,931 | 26,510 | 77.5 | 77.8 | 8,996 | 4,524 | 6,155 | 6,356 |
| Western Pacific | Sept. | 1,188 | 4,270 | 217 | 4,612 | 4,630 | 643 | 519 | 91 | 698 | 627 | 229 | 241 | 1,527 | 3,471 | 3,327 | 75.3 | 71.9 | 1,141 | 440 | 634 | 607 |
| | 9 mos. | 1,188 | 37,070 | 1,908 | 39,967 | 40,249 | 5,328 | 4,975 | 738 | 6,253 | 6,171 | 1,950 | 2,376 | 14,887 | 31,557 | 30,520 | 79.0 | 75.8 | 8,410 | 3,792 | 4,033 | 4,873 |
| Wisconsin Central | Sept. | 1,031 | 2,471 | 24 | 2,700 | 2,570 | 324 | 311 | 43 | 416 | 291 | 118 | 108 | 1,212 | 2,248 | 1,985 | 83.2 | 77.2 | 452 | 212 | 2 | 188 |
| | 9 mos. | 1,031 | 23,106 | 230 | 25,039 | 24,744 | 2,842 | 3,388 | 406 | 3,903 | 4,017 | 986 | 953 | 10,778 | 19,962 | 20,281 | 79.7 | 82.9 | 5,077 | 1,802 | 1,129 | 1,013 |

# Partlow Specified In Five Times As Many New Reefer Cars As All Other Temperature Controls *Combined!*

Of the estimated 1375* reefer cars scheduled for production in 1960, 1175 specify mercury-actuated Partlow temperature controls. This represents 85% of all new reefer car construction . . . a preference of better than 5 to 1!



Why this overwhelming swing to Partlow?

**Dependability is one reason!** Partlows are simple mechanical controls . . . built without tubes, delicate bellows, hair springs or electronic amplifiers. They're able to withstand the worst kind of road shock and vibration, without letup or breakdown.

**Easy maintenance is another!** Should it become necessary to replace the thermal element on a Partlow, the whole job can be done in a matter of minutes, on the job, with semi-skilled maintenance men.

**And versatility is still another!** Partlow designs controls specifically for railroad applications. The ZC model shown here, for example, is equipped with up to 5 switches, enabling it to cope with the most modern and exacting circuitry.

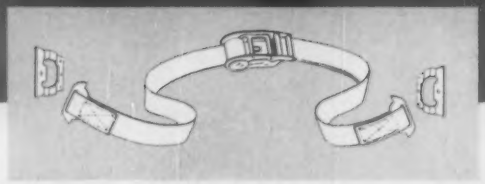
Partlow makes a complete line of economical temperature controls . . . indicating, non-indicating, recording. Write today for folder: "Temperature Control in Railroad Refrigeration."

*Railway Age, Feb. 8, 1960

**THE PARTLOW CORPORATION**

**Dept. R-1160 New Hartford, N.Y.**

# New Low-Cost Cargo Control System Cuts Case Goods Shipping Damage

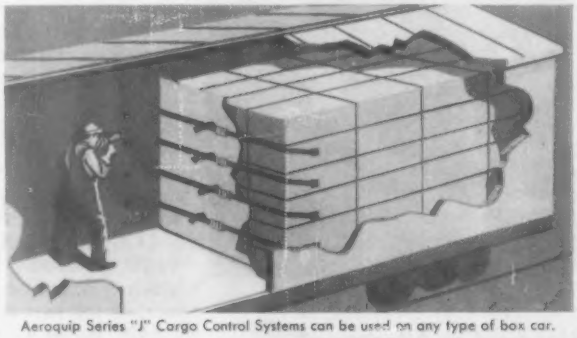


Low-cost, expendable wall brackets are nailed to boxcar walls. Mixed carloading is easier since brackets can be placed anywhere.

One man can install and use Aeroquip's Case Goods Cargo Control System in a fraction of time required for more complicated systems.

**The new Aeroquip Series "J" Cargo Control System is the easy-to-use, low-cost way to protect all bottled, canned and packaged goods against damage in transit and to reduce loading and unloading time. Simply attach expendable anchor brackets to boxcar walls with nails or screws, install reusable cardboard bulkhead, insert strap end fittings and tighten the Aeroquip Ratchet Buckle Strap Assembly by hand. That's all there is to it! No special tensioning, crimping or fastening equipment is required. No waiting for special device cars; almost any box car or reefer will work with the Aeroquip system. And Aeroquip's high-quality nylon strap assemblies are completely reusable.**

**Mail the coupon below for complete details and see how the new Aeroquip Series "J" Case Goods Cargo Control System can reduce shipping damages.**



Aeroquip Series "J" Cargo Control Systems can be used on any type of box car.

Aeroquip

**GENERAL LOGISTICS DIVISION**

2929 FLOYD STREET, BURBANK, CALIFORNIA RA11

IN CANADA: AEROQUIP (CANADA) LTD., TORONTO 19, ONTARIO

Aeroquip Products are Fully Protected by Patents in U.S.A., Canada and Abroad

Please send me bulletin GLB-113 on Series J Cargo Control System

Name_____

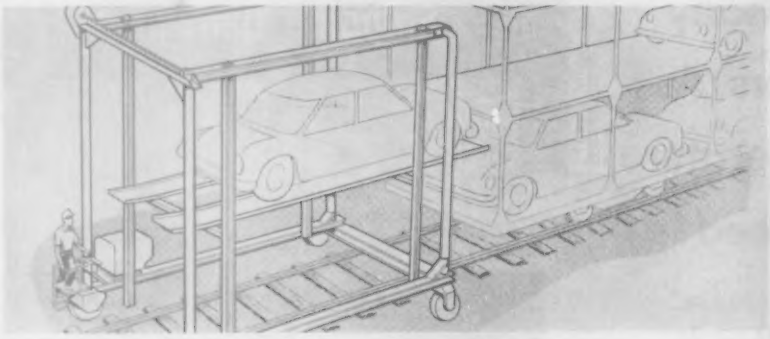
Title_____

Company_____

Address_____

City_____ Zone____ State_____

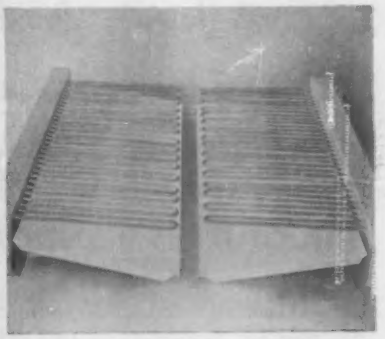
# New Products Report



## 'Autovator'

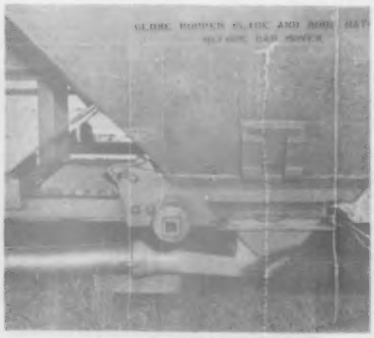
The "Autovator" is designed to load and unload automobiles to and from tri-level railroad cars being built for auto piggyback. It can be operated by one man, who can also drive the autos to and from the rail cars if necessary.

To load or unload the lower level of a railroad car, the Autovator platform is used like an ordinary ramp, with the railroad car end hydraulically adjusted to any variation in roadbed height. To load the second or third car levels, an automobile is driven on the Autovator platform in lowered position. The platform is leveled off and hoisted to the proper car level, stopping automatically at the right height. An hydraulically-operated hinge section at the car end is preset for alinement with the car. An automatic lowering button returns platform to ground level when auto weight is removed. For unloading, the procedure is reversed. *Travelift & Engineering, Inc., Dept. RA, Sturgeon Bay, Wis.*



## Car Thawer

Quick, economical removal of ice, snow and frozen residual material from hopper car bottoms before loading is promised by the maker of a specially designed electric radiant heater. The 44-by-22 in. units (RUC-32) are to be placed in pairs between rails and directly under cars. Equipped with waterproof fittings, each unit has a maximum capacity of 32 kw on 240-volt, 3-phase current. *Radcor, Inc., Dept. RA, Bradner, Ohio.*



## Hopper-Car Attachment

A hopper-car attachment has been developed for use in unloading cars in an emergency when regular equipment is inoperative. It is for use with the Ripco air caddy and is said to be easily installed on the hopper. It is held in place by the use of vice-grip pliers, and no pits are necessary. Moving the unit from one car to another is said to be easily accomplished; only one man is needed for this operation. *Ripco Air Systems, Dept. RA, Oxford, Pa.*

## New Auto Unloader Models

To meet specific needs encountered in various situations, the Buck Equipment Corp. has introduced five new models of its "LUL" automobile loader-unloader (RA, Sept. 26, p. 56). The new models are:

**LUL C-R**—Loads and unloads from multi-level cars to the rail. Heavy-duty; completely motorized.

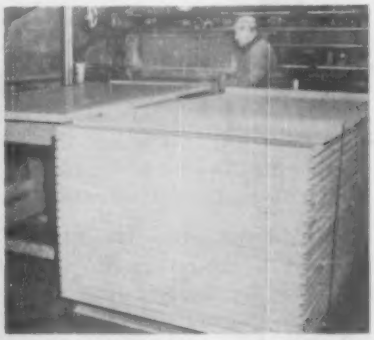
**LUL Model ULSD** — A middleweight, manually-powered machine which unloads from top deck of bi-level cars, or top two decks of tri-levels.

**LUL Model ULPD**—For unloading multi-level cars to short piggyback docks. Manually operated.

**LUL Model ULCR**—Unloads from all decks of multi-level cars. Rail-mounted; manually-operated.

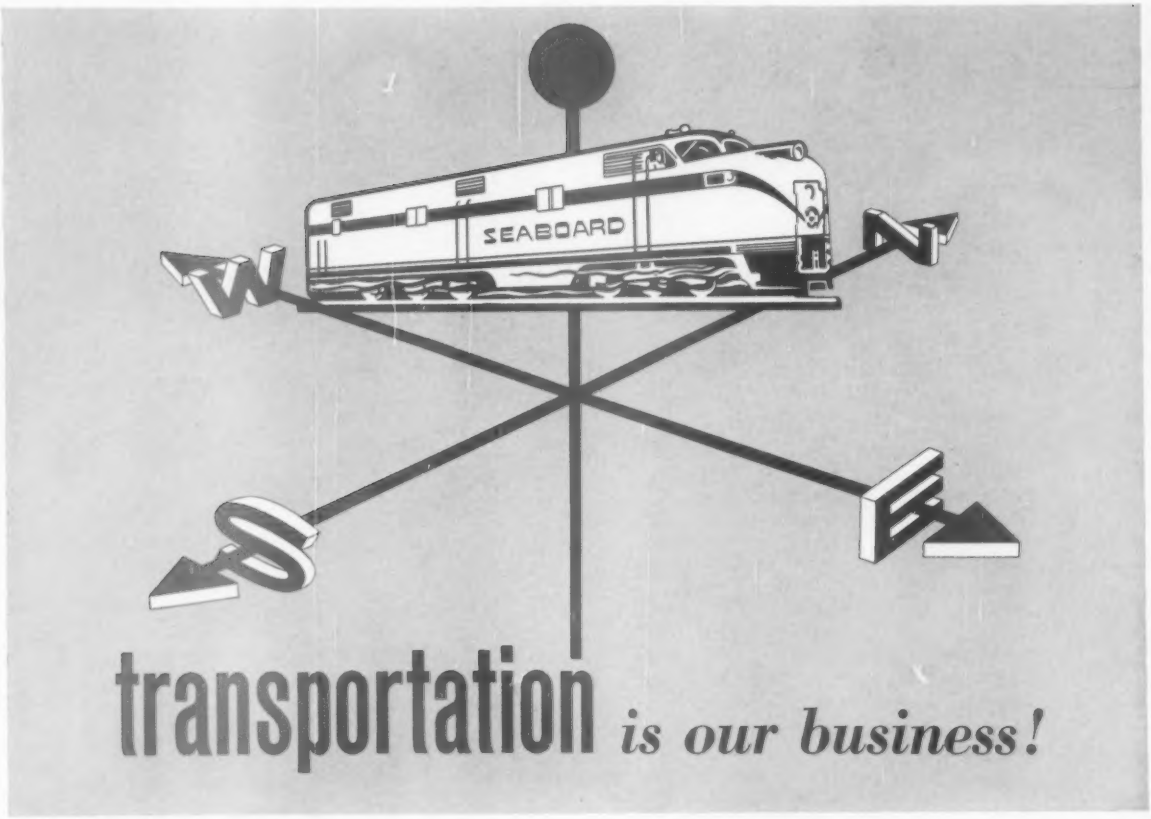
**LUL Model ULCDR**—A medium-weight machine designed to be mounted on a 40½-ft car with maximum 40-in. deck. Manually operated, it can unload from all decks of multi-level cars to dock or ground.

*Buck Equipment Corp., Dept. RA, Cincinnati, Ohio.*



## Reefer Decking

Decking being used in refrigerator cars under construction at the Los Angeles yard of the Pacific Fruit Express is of overlaid lumber. It is regular 2-in. Douglas fir, edged glued into 4-ft by 9-ft panels after drying to 6% moisture content. Both sides are laminated with ⅛-in. tempered hardboard made to PFE specifications. The panels are 1¼ in. thick. *Diamond Lumber Co., Dept. RA, 323 Pittock Block, Portland 5, Ore.*




# transportation *is our business!*

To the men and women of Seaboard, the phrase "transportation is our business" has a *personal* meaning, calling for individual thought and initiative, both in obtaining business and then in following through to provide complete shipping satisfaction.

When you route S.A.L., you put your freight in the hands of people who appreciate it and who are determined to keep you as a steady customer. Backing them up is a modern railroad, geared to meet every shipping need. Make Seaboard *your* way to and from the growing Southeast.

***Piggyback is one more development in Seaboard progress. Now available between our on-line points and Northern cities.***

**SEABOARD**
**AIR LINE**
**RAILROAD**

IN THE SOUTHEAST IT'S SEABOARD

THE ROUTE OF COURTEOUS SERVICE

# The New York Central spits in winter's eye!

To a railroad, winter had always meant drifted snow, frozen switches and delayed trains. Then Central's imaginative research staff attacked Old Man Winter with a new weapon, the Snow Blower!

A surplus jet engine from a B-36 hitched on to a caboose becomes a controlled hurricane swirling through icebound switchyards. In its wake, lights change from red to green, and that shipment to Boston you were worried about is on its way.

The Snow Blower is one of a host of ideas springing from Central's Technical Research Center. In this lab you'll find Central men utilizing nuclear energy, electronics, all the newest techniques, plus down-to-earth common sense to develop faster, more efficient freight transportation.

Most important, Central's research has one major objective . . . to provide our customers with faster schedules, consistent on-time performance, and continually better service.

NEW YORK CENTRAL SYSTEM

*ROAD TO THE FUTURE*

# MARKET OUTLOOK *at a glance*

## Carloadings

Loadings of revenue freight in the week ended Nov. 19 were not available as this issue of Railway Age went to press.

Loadings of revenue freight for the week ended Nov. 12 totaled 564,590 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Nov. 12

| District | 1960 | 1959 | 1958 |
|---|---|---|---|
| Eastern | 79,400 | 88,432 | 94,799 |
| Allegheny | 91,755 | 108,872 | 115,146 |
| Pocahontas | 43,793 | 52,230 | 54,445 |
| Southern | 111,655 | 123,134 | 119,951 |
| Northwestern | 68,307 | 90,172 | 78,990 |
| Central Western | 120,258 | 124,379 | 129,781 |
| Southwestern | 49,422 | 51,114 | 51,419 |
| Total Western Districts | 237,987 | 265,665 | 260,190 |
| Total All Roads | 564,590 | 638,333 | 644,531 |
| Commodities: | | | |
| Grain and grain products | 66,669 | 61,144 | 61,271 |
| Livestock | 6,270 | 9,132 | 7,915 |
| Coal | 98,287 | 116,916 | 119,565 |
| Coke | 6,148 | 5,905 | 8,481 |
| Forest Products | 35,218 | 41,025 | 39,170 |
| Ore | 22,725 | 54,477 | 36,423 |
| Merchandise l.c.l. | 33,241 | 40,172 | 44,294 |
| Miscellaneous | 296,032 | 309,562 | 327,412 |
| Nov. 12 | 564,590 | 638,333 | 644,531 |
| Nov. 5 | 599,493 | 561,223 | 658,442 |
| Oct. 29 | 620,712 | 587,776 | 674,991 |
| Oct. 22 | 637,311 | 607,517 | 674,845 |
| Oct. 15 | 653,145 | 579,410 | 696,403 |
| Cumulative total, 45 weeks | 26,999,938 | 26,949,899 | 26,407,151 |

**PIGGYBACK CARLOADINGS.**—U. S. piggyback loadings for the week ended Nov. 12 totaled 10,794 cars, compared with 8,284 for the corresponding 1959 week. Loadings for 1960 up to Nov. 12 totaled 484,686 cars, compared with 361,177 for the corresponding period of 1959.

**IN CANADA.**—Carloadings for the seven-day period ended Nov. 7 totaled 69,715 cars, compared with 89,486 for the previous ten-day period, according to the Dominion Bureau of Statistics.

| | Revenue Cars Loaded | Total Cars Rec'd from Connections |
|---|---|---|
| Totals for Canada | | |
| Nov. 7, 1960 | 69,715 | 26,173 |
| Nov. 7, 1959 | 82,813 | 27,312 |
| Cumulative Totals | | |
| Nov. 7, 1960 | 3,160,232 | 1,195,009 |
| Nov. 7, 1959 | 3,331,411 | 1,202,792 |

# New Equipment

**FREIGHT-TRAIN CARS**

► *Louisville & Nashville.*—Directors authorized purchase of 900 70-ton open top hopper cars and 900 70-ton general purpose gondolas from Pullman-Standard, at a total cost of $19,548,000. Cars will be built at Pullman-Standard's Bessemer, Ala., plant, for delivery in early 1961. All cars will be equipped with roller bearings. (RA, Nov. 21, p. 7.)

► *Missouri Pacific.*—A $31.8 million modernization program for 1961 will include construction of 1,150 new freight cars at DeSoto, Mo., company shops, at an estimated cost of $12 million. All cars will be equipped with roller bearings. Shops will build 300 50-ton, 50½-ft box cars with 9-ft doors and high-capacity draft gear; 200 50-ton, 50½-ft box cars with 9-ft doors, damage prevention devices and nailable steel floors or equivalent; 100 70-ton, 50½-ft box cars with 9-ft doors, damage prevention devices, nailable steel floors or equivalent and cushion underframes; 200 70-ton, two-bay steel covered hopper cars of 2,055-cu ft capacity; 50 70-ton, three-bay steel covered hopper cars of 3,000 cu ft capacity; 50 70-ton, 53½-ft flat cars; and 250 50-ton, 50½-ft box cars with 15-ft double doors (approved under 1960 program and now set up for construction in 1961).

► *Pennsylvania.*—Placed orders for 3,500 freight cars—2,500 70-ton hopper cars and 1,000 heavy duty jennies—at an estimated cost of $28,150,000. Cars will be built in PRR's Samuel Rea Shop at Hollidaysburg, Pa. Delivery will begin in December and will be completed by September 1961. The new order brings to $285 million the PRR's recent expenditures and commitments for new equipment, according to President A. J. Greenough. He said the program to provide 23,000 new freight cars costing $215 million has been completed. Meanwhile, the road's 1960 freight-car rehabilitation program, involving major work on 10,500 cars, has reached 60% of completion.

# Orders & Deliveries

► *Orders Increase.*—Orders were placed in October 1960 for 5,885 new freight cars, compared with 2,061 in September. October 1959 orders totaled 2,722. Deliveries in October totaled 4,632, compared with 4,265 in September and 2,284 in October 1959. The backlog of cars on order and undelivered as of Nov. 1, 1960, was 22,900, compared with 21,662 on Oct. 1 and 36,199 on Nov. 1, 1959.

| TYPE | ORDERED October 1960 | DELIVERED October 1960 | UNDELIVERED Nov. 1, 1960 |
|---|---|---|---|
| Box—Plain | 675 | 1,318 | 4,676 |
| Box—Auto | 0 | 0 | 200 |
| Flat | 445 | 770 | 2,082 |
| Gondola | 1,129 | 640 | 3,927 |
| Hopper | 2,654 | 891 | 6,974 |
| Cov. Hopper | 480 | 237 | 891 |
| Refrigerator | 150 | 486 | 2,636 |
| Tank | 352 | 246 | 1,147 |
| Caboose | 0 | 33 | 63 |
| Other | 0 | 11 | 304 |
| TOTAL | 5,885 | 4,632 | 22,900 |
| Car Builders | 927 | 3,160 | 7,611 |
| Railroad Shops | 4,958 | 1,472 | 15,289 |

a RAILWAY AGE time-saver page

# Loomis Sees Traffic Upturn

► **The Story at a Glance: This year's anticipated traffic boom turned out to be only a "mirage"—but "better revenues and earnings" lie ahead in 1961, in the view of AAR President Daniel P. Loomis.**

**He bases his optimism on:**

- **An expected pickup in the national economy.**
- **Continued rate and service innovations by railroads.**
- **Prospects for an improved legislative climate in Washington.**

**He also feels that any improvement in earnings will be reflected "very early" in orders for new equipment.**

In his brief "state-of-the-industry" message at the annual dinner of the Railway Progress Institute in New York Nov. 17, AAR President Daniel P. Loomis made no attempt to gloss over the disappointments of the immediate past.

"As 1960 turned out," he said, "it has given railroads just about the shortest boom on record. The expectations of great promise for the economy generally turned into a mirage. The year simply plodded along and is now—mercifully—limping out."

But Mr. Loomis was anything but pessimistic for the future.

"With politicking behind us," he said, "I believe the nation will now go to work on other things, and we can look for a pickup in the overall economy.

"For railroads, this means better traffic potentials and, I trust, better revenues and earnings. You can count, as well, on continued evidence of re-thinking on the part of railroad managements concerning everything we do—as pointed up in new services, in rate innovations, more piggybacking and container traffic, mergers, intensified efforts to diversify and otherwise to streamline plant and operating methods.

"As for the legislative climate in Washington, I have a feeling it will be better than that of 1960 and 1959. Next year will bring progress, I believe, in our efforts to show Congress the good sense of our proposals to shorten the depreciation write off period for rolling stock and for other transportation investments. We also count on progress in some states and cities in getting . . . property tax relief.

"Increased traffic and relief on the tax front will, of course, provide money for other urgent purposes. . . . As extra revenues are made available, they will be reflected very early in orders to supply companies."

Mr. Loomis concluded with a prediction that "the 1961 RPI dinner will find the railroad industry and the railroad supply industry in a much healthier position."

The AAR chief's bullish remarks came in the face of predictions that railroad earnings this year will dip to the lowest level in a decade. Some informed sources look for earnings no higher than $470 million. If so, this would be the first time since 1949 (when earnings sagged to $438 million) that the figure has fallen below the $500 million mark.

At first glance, Class I railroad statistics for this year's first nine months present a seeming paradox. Total loadings through September were actually higher than for the comparable 1959 period. At the same time operating expenses and taxes declined.

Yet, net income through September was estimated at only $303 million, compared with $393 million in 1959 and $353 million in 1958.

The answer is that the railroads' traffic problems are qualitative as well as quantitative.

For example, 1960's carloadings have been inflated by a 54% increase in low-rated ore loadings (due to the reopening of the steel mills early in the year). But in the revenue column, this is offset by decreases in loadings of higher-rated commodities — for example, a 2.7% drop in manufactured and miscellaneous goods.

While much of this decrease in high-rated traffic is attributed to the general business downturn, there is some evidence of a continuing loss of such traffic to motor carriers. One economist points out that where railroad loadings of manufactured goods have recently been showing a decline from 1958 figures, truck loadings have been showing a slight increase. (Comparisons of 1960 with 1959 are distorted by last year's steel strike.)

A Wall Street investment house recently advised that "anyone who doubts a business recession is in progress should talk with the nearest railroad president." Actually, those railroad executives who have talked about the situation have been inclined to share Mr. Loomis' cautious optimism.

The head of one big midwestern railroad told Railway Age that he doubts that the industry is "in either a recession or a depression." He looks for an upturn at least by mid-1961. In his view, current depressed earnings are the result of a "regulatory lag" that caught the railroads in a squeeze between increased wages, the rise in retirement taxes, and the railroads' chronic inability "to adjust costs like other businesses."

## RR Buying: Down, Then Up

An upturn in railroad purchasing —but not an immediate upturn— was forecast by a panel of railroad purchasing officers at RPI's third Industry Outlook Conference, held as a part of this year's annual meeting.

But the panel concurred in predicting that things are going to get a little worse before they get better. Its members thought that 1961 capital investment will fall behind this year's levels by 10%, or perhaps more. Railroad revenues, they thought, should start climbing again in 1961, and this should lead to a rise in spending in 1962 and 1963.

Using an AAR estimate of gross capital expenditures by railroads totaling $952 million in 1960, a 10% decline would put 1961's expenditures at a little over $850 million.

The panel also warned of the effect of foreign competition on the railroad supply industry. While standing firm in their policy of "buying American," they warned that competitive foreign prices could not long be overlooked.

In answer to questions from some 200 suppliers, the panel also pointed to the increasing use of specialized cars, counting the box car down, but not out, for the future; seemed to think the effect of railroad mergers and consolidations would be to reduce purchasing in the near future, but increase it in the long-run. Their estimates of freight car orders for 1961 ranged from a low of 40,000 to a high of 50,000-55,000.

The six-member panel consisted of Henry F. McCarthy, vice president—purchases & stores, New York Central; H. P. Millar, vice president—purchases & stores, Canadian Pacific; H. B. Nordstrom, director of purchases, Great Northern; W. H. Rose, general purchasing agent, Seaboard Air Line; H. V. Schiltz, general purchasing agent, Burlington; and Frank J. Steinberger, vice president and general purchasing agent, Santa Fe. RPI President Holcombe Parkes was moderator.

## ICC GETS NEW HAVEN RELIEF PLAN *(Continued from page 10)*

proper role of the federal government is to supplement the action of governmental agencies more intimately concerned with the problem."

The report also says the Commission should urge upon the Congress a larger and more direct federal role in connection with the mass transportation problems of larger urban areas, but adds that a program of federal cash subsidies, "whether lavish or modest, would, in the long run, do more harm than good."

"Cash subsidy legislation, no matter how artfully drawn, would necessarily involve a means test inasmuch as the commutation service of some Class I railroads is not unprofitable," the report adds. "If the size of the subsidy is determined by the size of the deficit, two results are inevitable. First, there would be little or no incentive to make a profit or to cut losses. And secondly, some agency of the federal government would have to be granted authority to establish passenger train schedules in the interest of protecting the public purse."

The report's recommendations are summarized below:

1. Reaffirmation by the Commission of the pertinent points in its railroad passenger train deficit case, including particularly the recommendations for repeal of the 10% federal excise tax on passenger fares and greater equity in state and local taxes on railroad property.

2. Consideration of lessening or eliminating the railroad's obligation to maintain, repair or replace highway bridges, and consideration by local governments of the feasibility and desirability of including passenger stations and adjacent parking areas in their urban or community development plans.

3. Consideration by the New Haven of prompt abandonment of minor branch lines having a very light density traffic, and careful analysis of other lines to determine whether they have an economic future.

4. Maximum use of the New England Transportation Co., New Haven's motor carrier subsidiary, in a coordinated service with the railroad to and from stations on lines abandoned in the future.

5. Separate management of the motor carrier subsidiary and operation of it in a completely coordinated and integrated rail-motor transportation service.

6. Intensification of efforts to complete lease arrangements between the New Haven and the New York Port Authority for acquisition of 115 new multiple-unit motor passenger cars to replace old cars now in service in the New York suburban area.

7. Application by the New Haven for authority to increase commuter fares by 20% to 30%, if in the judgment of management, undue diversion to other forms of transportation would not result.

8. Continuance of electric locomotive operations by the New Haven and the initiation of studies looking toward eventual acquisition of additional electric locomotives to operate between New York and New Haven.

9. Steadfast adherence by management, within the limits of the carrier's financial ability, to programs providing for a regular maintenance of plant and equipment.

10. Strengthening of the New Haven's management "in those areas where it now appears to be weak," when the road's future is made secure.

11. Consideration by the Commission of a recommendation that Congress enact legislation to enable railroads to acquire passenger train equipment on terms and conditions more liberal than now exist for the purpose of insuring the continuance of passenger service required by the public convenience and necessity and by the nation's defense effort.

12. Consideration by the Commission of a recommendation that Congress enact legislation authorizing the ICC to find taxes levied on interstate railroads by state and local authorities to be unlawful as an undue burden on interstate commerce under certain limiting conditions.

Exceptions to the report may be filed within 30 days from the date on which it was served—Nov. 21. If no exceptions are filed within that period, and the Commission orders no stay or postponement, the report will become a report of the Commission and the recommended order to discontinue the inquiry will become a Commission order.

## Dividends Declared

**ALLEGHANY & WESTERN.**—$3, semiannual, payable Jan. 1, 1961, to holders of record Dec. 16.

**BEECH CREEK.**—50¢, quarterly, payable Jan. 1, 1961, to holders of record Dec. 15.

**CHESAPEAKE & OHIO.**—common, $1, quarterly, payable Dec. 20 to holders of record Dec. 1; 3½% convertible preferred, 87½¢, quarterly, payable Feb. 1, 1961, to holders of record Jan. 6.

**CHICAGO, ROCK ISLAND & PACIFIC.**—40¢, quarterly, payable Dec. 31 to holders of record Dec. 16.

### Locomotive Cemetery: A 'Monument . . .'

"On the northern edge of the city of New Haven lies the principal yard of the New York, New Haven and Hartford.

"A portion of the Cedar Hill Yard is set aside for what is euphemistically called 'locomotive storage.'

"Here stand dozens of diesel road and yard locomotives abandoned to the weather, rusting and in various stages of disintegration. Some are simply cannibalized locomotive carcasses. Others are intact but with exhaust fan roof grilles open, admitting rain and snow to the machinery inside. In numerous instances, cab doors and engine shutters are wide to wind-blown dirt as well as weather. In some cases, the equipment trust plates declare that the New Haven is still in debt for property retired before it reached its normal life expectancy.

"This locomotive cemetery symbolizes the decline of a once prosperous railroad—a decline that a management fully responsive to changing competitive factors might have forestalled. This locomotive cemetery may also be viewed as a monument to excessive state and local taxation, to the discriminatory promotional policies of governmental agencies, and to the shortsightedness manifested at times by patrons and by employees of the carrier. If, as we believe, the New Haven Railroad is still a vital artery of transportation, its preservation cannot be made the exclusive responsibility of any individual or any single group of individuals."

*—From the report on New Haven operations and practices which has been made to the ICC by Commissioner Webb and Examiner Ries.*

# NITL Backs Managerial Rights

► **The Story at a Glance: In a relatively quiet annual meeting, the National Industrial Traffic League went on record, Nov. 17-18, as:**

- **Favoring freedom for railroad management to create or abolish specific jobs;**
- **Opposing proposed increases in demurrage charges and certain other car-hire fees and regulations; and**
- **Opposing equal application, to railroads and water carriers, of the "bulk-commodity" exemption.**

Action to implement some of its established positions, rather than creation of major new policies, marked the National Industrial Traffic League's 53rd annual meeting, at New York. The net result was to line the League up in support of some railroad proposals, but against others.

Strongest backing for the carriers came in the League's vote "to favor amendment of the Railway Labor Act, the Norris-LaGuardia Act, and the National Labor Relations Act so as to make it clear that the phrase 'terms and conditions of employment' or equivalent language do not include creation or abolition of specific jobs or positions." In voting also "to support appropriate legislation to that end," the League reaffirmed its standing policy that "there should be the greatest degree of responsibility upon, and freedom of, carrier management," and that "regulation . . . should not encroach upon the proper sphere of managerial discretion."

On the other hand, the League voted to oppose railroad-proposed increases in demurrage charges (to $6 and $12 per day) and also a proposed change in the demurrage rules which would offset debits by credits at a 2-to-1 ratio. It further opposed, "until proper showing of justification has been established before the ICC," a proposed rental charge [originally published in paragraphs (a) and (b), Item 160, X-223] of $7.50 per car per day for railroad-owned cars used in plant transportation service.

Closely allied to these actions were League objections to the Ex Parte 223-proposed reduction in free time to be allowed for railroad cars at ports; and to special detention charges of $10 per day for "LO" covered hopper cars.

The League also reaffirmed action taken at earlier meetings in recommending retention of the exemption from regulation provided in the Interstate Commerce Act's Section 303(b) and (c) for water-hauled bulk commodities. It paralleled this by opposing "any proposal extending the bulk commodity exemptions to movements via rail." "Pleas for equal treatment" are "impressive," a League committee reported, but, in this case at least, "completely impractical." No logical reason, the committee said, "could be found for exempting the movement of bulk freight by railroads in no way competitive with water carriers, nor was any feasible way found to limit the exemption by railroads of bulk commodities when confined to routes competitive with water carriers."

Effects of the action on exemptions may, however, have been somewhat softened by adoption of another committee's suggestion that the whole subject might merit reconsideration when and if appropriate legislation is introduced in Congress. Further, the League reiterated its support of the railroad position in the John I. Hay barge-line acquisition case; and beat down an effort to bring about retraction of its 14-year-old policy that new waterway projects be submitted to the ICC for economic approval before funds are appropriated for them.

In other actions of interest to railroads, the League:

- Supported incentive class rates filed by southern railroads between the South and Official Territory, and voted to ask the ICC to vacate its suspension of those rates in I&S 7446.
- Approved intervention in "a key proceeding" involving Plan III type motor carrier rates, on grounds similar to those advanced in supporting the railroads' Plan III piggyback rates.
- Opposed "unreasonable or arbitrary charges" for pick-up or delivery of less-carload freight; and also "motor carrier surcharges or increases of a similar type which will materially alter rate structures or relationships."
- Supported REA Express aggregate rates on wearing apparel.
- Recommended repeal of Section 557 of the Railway Mail Pay Act.
- Agreed to cooperate with the Associated Traffic Clubs "in their effort to cut down on unreasonable or unnecessary expense in connection with annual dinners and entertainments."
- Voted to continue study of exemptions provided for in Part II of the Interstate Commerce Act.
- Repeated earlier calls for "strict compliance" with transportation regulatory laws, on the ground that "there is by far too much unlawful or unauthorized transportation," which shippers, "wilfully or without knowledge," are aiding and abetting.
- Approved through routes and joint rates for carriers serving Alaska and Hawaii.

Speaking at the League's annual luncheon, Donald I. Rogers, business and financial editor of the New York Herald Tribune, warned the members that "we are in imminent danger of losing" the American system of profit-making and profit incentives. "Not depression, but prosperity, is our greatest danger."

"We are going to have," Mr. Rogers said, "at least three major economic problems in the Sixties. The first is the threat of a continuously rising trend in unit labor costs—higher and higher production costs—with resultant inability for us as a nation to maintain a high level of economic activity and a high level of employment. The second is a likely shortage of venture capital. The third will be posed by the growing economic strength of other industrial nations."

R. M. Boyd, general traffic manager, Pittsburgh Plate Glass Co., Pittsburgh, was elected president of the NITL, to succeed W. H. Ott, general traffic manager, Kraft Foods, Chicago. "It will be part of my job," Mr. Boyd said, in accepting his election, "to make sure the voice of the shipper is heard in the halls and committee rooms of Congress in connection with the national transportation legislation which will be considered during the next two years."

E. W. Girton, general traffic manager, Wilson & Co., Chicago, succeeds Mr. Boyd as vice president, while R. A. Cooke, manager, traffic department, American Newspaper Publishers Association, New York, continues as treasurer. The retiring president, Mr. Ott, becomes chairman of the executive committee, with Kenneth P. Tubbs, manager, transportation department, Dallas Chamber of Commerce, as vice chairman. J. E. Hale, assistant manager, traffic department, Standard Oil Co. of California, San Francisco, and G. E. Schneider, freight traffic manager, New Orleans Public Service, were elected chairman and vice chairman, respectively, of the board.

In a sharp departure from its recent policy of rotating most of its annual meetings between New York and Chicago, the League voted to meet in 1961 in Denver (Nov. 16-17); in 1962 in Pittsburgh, and in 1963 in St. Louis. Its next New York meeting will be in 1964.

# Editors Afield

DALLAS, TEXAS

**Talk to shippers** up and down the center of the country, and you come up with one inescapable conclusion: They are concerned about, and annoyed by, seemingly inexplicable delays and irregularities in railroad service. Those twin topics were the subject of a lot of unhappy talk when the National Association of Shippers Advisory Boards met at Minneapolis (RA, Oct. 24, p. 26). I ran into the same sort of comment at Kansas City and again, strongly, here at Dallas.

**Shipper dissatisfaction,** unfortunately, is going beyond the talking stage. It's the basis for a lot of objections raised to railroad proposals in Ex Parte 223. And I was given chapter and verse on cases where repeated service delays have led to transfer of traffic from railroads to competitive modes of transport.

**In one such case,** a manufacturer with a small but steady export business was willing to allow four days for a 300-mile haul to his shipping port. When he failed to get consistent four-day service on what would look like a normal one- or two-day move, he resorted to private trucking, even in the face of a recognizably higher cost. Another case is that of a grain exporter who keeps close tabs on his tidewater-bound cars; he bypasses them with trucked grain if he finds them moving too slowly to meet sailing schedules.

**Typical shipper reaction** runs something like this: "Speed is fine, but dependability is better. We can gear our operations to just about any reasonable schedule the railroads set up. But if they say five days from A to B, then we want it to be five days every time; not three days one time and 10 the next. And early arrivals can be just as bad, in terms of demurrage charges and clogged unloading facilities, as late arrivals."

**A lot of the trouble,** shippers seem to feel, lies in initial and destination terminal delays. NASAB delegates, for example, said that in some major terminals the average time between release of a loaded car and its dispatch in a road train might be 40, 48, 72, even 96 hours. Add to that probable similar delays at destination terminals, and lesser delays at intermediate yards and interchange points, and any objective observer is bound to concede that the shippers have a point.

**Some of them appear,** however, to make that point almost reluctantly—and to precede it with expressions of sympathy for railroad problems, and of admiration for the job the roads are doing in many respects. One gets the definite impression that a lot of shippers would like to keep a lot of traffic on the rails, or give a lot back to them. The business seems to be there if the railroads can just give, consistently, the kind of dependable service that's necessary to attract it.

**Complaints about delays** don't extend to piggyback. That appears to be moving well, just about everywhere—which is undoubtedly a major reason for its continuing popularity at a time when other traffic is static or declining.

*Gardner C. Hudson*
*Traffic & Transportation Editor*

# AAR Reports on L&D Research

Modern newsprint presses require true-running rolls to prevent jamming of the equipment. How to keep the 1,750-lb newsprint paper rolls from getting out-of-round during shipment is only one of the loss and damage items under intensive study at the AAR Research Center.

In the 1960 report on research activities, just released, loss and damage studies by the Container and Loading Research Division also covered investigations into items like unloading gypsum rock from covered hopper cars without vibrating and damaging the car itself, use of nylon loops to suspend fresh beef, strength of fiberboard containers, and packaging of furniture and ceramic articles to prevent damage. Work bearing on this same subject included the extensive studies made by the Mechanical Research staff on all standard pocket draft gears to determine the actual performance of eleven types of gears under controlled impact conditions.

Mechanical research also included studies of oils, additives and roller-bearing greases, and journal bearing development. Of particular interest is a chart comparing lubricator and loose waste performance in journal boxes. The chart showed that 1,201,508 cars, 56.2% of the 2,134,152 U.S. and Canada car fleet, were equipped with lubricators as of June 30, 1960. Average mileage between hot-box set-off, January to June, 1960, was 713,117 miles for lubricators, 127,595 miles for loose waste.

The Engineering Division delved into road stabilization and economies to be derived from soil engineering procedures. Nuclear-activated moisture and density apparatus (depth probes) was used with very satisfactory results.

# Unions Fight C&NW Proposal

Attorneys for the Chicago & North Western asked the Illinois Commerce Commission to "investigate the operation of [North Western's] push-pull suburban trains and say, by order, that with only an engineer in the cab it is a safe and reasonable operation."

In a full day of hearings, the Brotherhood of Locomotive Firemen and Enginemen and the Brotherhood of Locomotive Engineers argued that the commission lacked jurisdiction to issue an order that would "interfere with collective bargaining."

Carl McGowan, C&NW general counsel, disputed a brotherhood contention that the recently created Presidential work rules study commission "preempted the field of investigation" and asserted that the Section 6 notices served by the railroads on the operating brotherhoods last November referred "only to firemen in yard and road freight service." He added that the Illinois Commerce Commission is the "only body authorized to prescribe a safe and reasonable operation" for commuter service in Illinois.

The commission recessed further hearings in the case pending a decision on a motion of dismissal due to "lack of jurisdiction."

# You Ought To Know...

**Management representatives** on the 15-member Presidential work rules study commission (RA, Oct. 24, p. 9) will be Daniel P. Loomis, AAR president; Thomas A. Jerrow, Great Northern vice president—operations; J. E. Wolfe, Burlington vice president—personnel; B. B. Bryant, C&O assistant vice president—labor relations; and G. W. Knight, Pennsylvania director of labor relations. The commission will also include five public and five labor members.

"**Containers** which can ride rails, highways, waterways and now the air provide an answer shippers have long wanted to many transport problems. They are too irrefutably right to permit any obstacles to stand for long in the way of their ultimate development," W. W. Kremer, vice president—traffic of the Milwaukee, said in a panel discussion at New York last week. The discussion followed a demonstration in which a Strick container was transferred by helicopter from a New York Central freight car to a U. S. Lines ocean freighter.

**Government guaranty** of a $3,000,000 loan is sought by Boston & Maine in an application filed with the ICC. Proceeds would reimburse the road's treasury for capital expenditures. Guaranty of a B&M loan for a similar amount was approved last year.

A **post-card survey** of 200,000 commuter-train, subway and elevated riders in Philadelphia got under way last week as part of the Penn Jersey Transportation Study, which is seeking answers to the Delaware Valley's mass transportation problems. One question: Is the appeal of public transport economy, convenience—or merely the lack of private autos?

**Railroad out-of-pocket losses** on express business have been whittled to about $7.5 million for 1960, according to REA Express President William B. Johnson. He noted that in 1959 railroad express losses were cut to about $14 million from an originally-anticipated $38 million. Mr. Johnson made these observations in announcing that REA has asked the ICC for a 20-cents-per-shipment additional charge on all LCL express traffic, effective Jan. 5. "Virtual elimination of the deficit in the near future is a necessity," he said, "if the express business is to be assured of continuance under the reorganization program now in progress."

**Santa Fe's interest** in Western Pacific "lies chiefly in extending its influence into territory already adequately served, with no compensating benefit to shippers, communities or the general public," Southern Pacific charged last week. SP, also bidding for control of WP, contends that its plan would provide opportunities for improved efficiency and economy of rail service unmatched by any other proposal for a combination of railroads.

**Piggyback and passenger service** are bright spots on the B&O. The road's "TOFCEE" revenues for the first 10 months of 1960 totaled $4.25 million, a 65.9% increase over the same period last year. Total passenger-train revenues increased $2.8 million, or 12%, in the first 10 months. B&O President Howard E. Simpson told stockholders that reduced 30-day, round-trip coach fares were helpful in increasing passenger revenues.

**Purchase** of Travelift & Engineering, Inc., for a sum in excess of $1,000,000 was announced by the Drott Manufacturing Corp. of Milwaukee and Wausau, Wis. Travelift, which will be operated as a division of Drott, manufactures a line of mobile straddle carriers in 22 standard models.

**Compulsory arbitration** of rail labor disputes has been urged by M. S. Smith, PRR vice president and Pittsburgh region manager. He said the Railway Labor Act "compels, in effect, what amounts to compulsory arbitration for management while labor is free to act as it wishes." So long as the industry functions "under a federally administered price scale," he added, "the government should not piously disclaim its responsibility for regulating wages and working conditions on the grounds that by so doing they would abridge our so-called freedom."

**Experimental shipment** of frozen fish sent from Vancouver to Montreal using liquid nitrogen as a refrigerant was pronounced successful by Canadian Pacific. After almost seven days in transit, temperature in the car (specially insulated with plywood and polystyrene) registered 52 degrees below zero. Temperature inside the car when it left Vancouver Nov. 10 was 100 degrees below zero.

**Automatic operation** of a double-track, stub-end terminal is contemplated by the Chicago Transit Authority at its Jackson Park terminal. Arriving trains will automatically be routed to the empty station track. Departing trains will be routed to the right-hand main track. A control panel will permit manual operation.


**COMING . . .**

**Annual Review and Outlook—Jan. 16, 1961**

Report on year-end railway trends and the outlook for 1961. An unduplicated reference record, containing a comprehensive review of the results of 1960 railway operations and tabulation of the year's significant railway statistics.

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# TOFC: 'Too Much Guesswork'

The continued healthy growth of piggyback traffic and service is indeed gratifying. It is one of the bright spots in the current railroad situation. Despite present success, however, a nagging question persists: Can piggybacking really become a factor in reestablishing railroading as a "growth industry" if TOFC rates and service continue on an experimental basis; if, in fact, the carriers themselves lack complete confidence in their dependable permanence?

There are, for example, few railroads today able to assure shippers that their present type of piggyback service is going to predominate five or ten years hence. Some roads favor Plan I. Yet truckers who want to use this service find it available, so far, only in restricted areas.

Plans III and IV are in jeopardy from an adverse report by an ICC examiner. Some railroads are critical of this kind of piggyback service which, they believe, "diverts traffic from box cars rather than from the highway." Still other railroad people are critical of Plan II service. These critics believe some Plan II rates are too low, while other rates are too high—and, "if hauling trailers on flat cars costs less than hauling them on the highway, then that economy should be reflected in competitive rates."

That piggyback continues its sturdy growth despite such wide diversity of opinion on fundamental policy questions merely serves to give evidence of its lusty economic and technological health.

From extended observation, we believe there is a necessary preliminary step which must be taken before a generally satisfactory solution can be found to the "piggyback question." This preliminary step, we believe, is to *maximize the economy and attractiveness of orthodox railroad service, in standard equipment.* As things are now, if a given piggyback service attracts considerable traffic—there are few people who can say for certain whether the service has succeeded because of its inherent economic superiority—or, rather, because either box car rates or truck rates are unrealistically high. You can build a new business with confidence if you know that your costs are lower than the other fellow's costs—but you can't be nearly as confident if you are building traffic merely on the other fellow's high rates, which it might be possible for him to reduce.

There are hundreds—yes, thousands—of commodities that can move in box or open-top cars that are rated by the railroads to be, at least, compensatory, but with minimum loads at half the potential lading. These minima have been established or retained by railroads in the effort to compete with truck minima, but truck minima are set at much nearer vehicle capacity than are most carload rates. Railroads are, thus, in effect, *seeking to use half-filled railroad cars to compete with fully loaded trucks.* If railroads would provide proportionately reduced rates for full carloads, wherever present actual loads and minima are far less than "potential," then the inherent economy of orthodox railroad service in standard equipment would quickly become manifest.

If piggyback rates—whether Plan I, II, III, or any other plan—were then made at a profitable level and were still to take traffic away from standard railroad equipment, then there could be complete assurance that the piggyback service was going forward on its own inherent economy; and the guesswork and uncertainty about the permanence of the service would vanish.

There are a lot of shippers—and railroad men too—who are reluctant to see "rate relationships" (between commodities and markets) discarded. But it is becoming increasingly impracticable to preserve these relationships where one deals only in truckload quantities and where any shipper or receiver can buy or rent a truck. If railroads had rates in standard equipment, based on full loads in big cars (or, maybe, multiple cars), then their costs would be reduced to a minimum. Hence their margin under competitors' costs would enable them to continue desirable "value of service" pricing, at least to some degree.

Under this kind of carload pricing, piggyback could go forward—competing directly with standard railroad service and over-the-road trucking, fortified by the superior economy of TOFC to highway movement for over-the-road hauls. If TOFC were then to take tonnage from box cars, it would only be because of superior economy—no argument about it.

Piggybacking has a great future. Its growth will be faster and its profitability and permanence more assured, when it is built as a superstructure upon a foundation of strictly economic pricing of orthodox railroad service in standard equipment.

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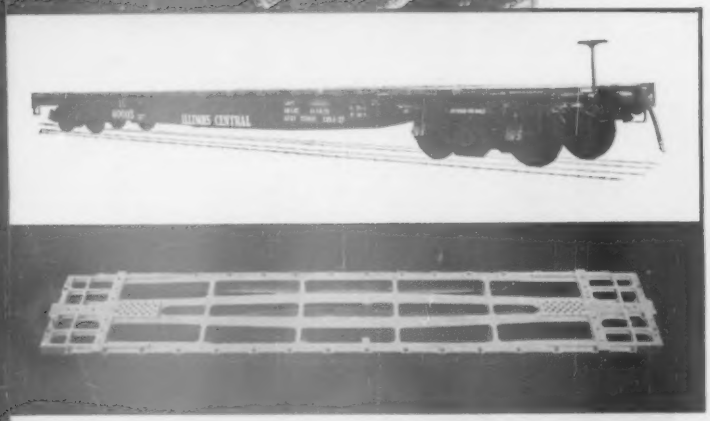




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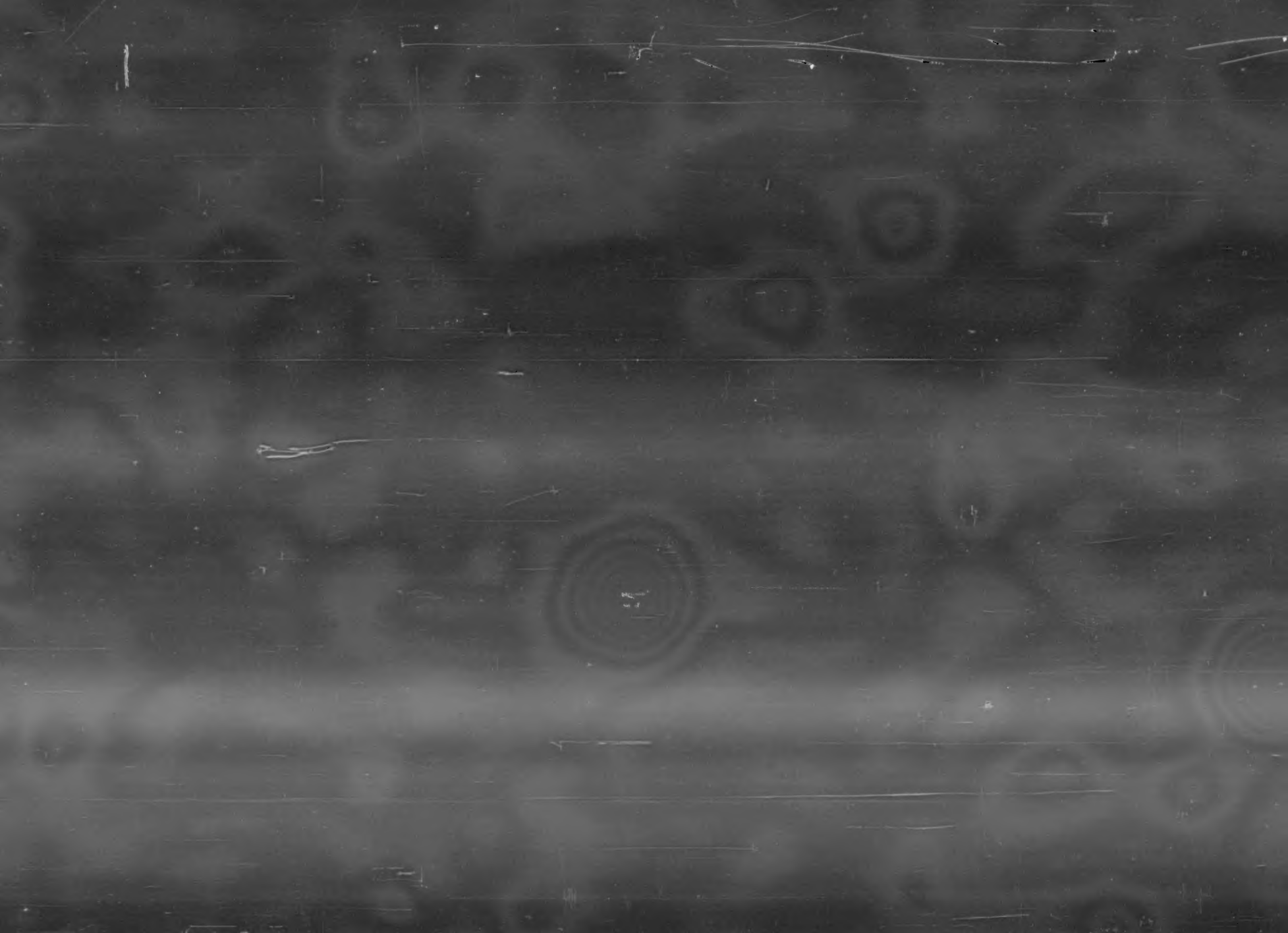
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